

ATALOG Nº 18

BOINTEY VISES of WRENCHES





TABLISHED

1876

Red 12/21/17

MARK



Established 1876

Incorporated 1901

Bonney Vise & Tool Works

Incorporated

Allentown · Pennsylvania · U · S · A

Catalogue No. Eighteen

A Reference Book on Vises and Wrenches of All Kinds

TRADE MARKS
Registered in U. S. Patent Office



"BONNEY"



Philadelphia Office, 405-406 Stephen Girard Building
New York Office and Store, 86 Warren Street
Factory Cable Address "Bonnevise", Allentown, Western Union Code
New York Cable Address "Crowco", New York, Western Union Code
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TERMS

INVOICES PAYABLE ONLY IN New York City PAR funds with NO ALLOWANCE FOR EXCHANGE.

All Goods delivered F. O. B. Cars ALLENTOWN without charge for packing, except special packing for Export.

Goods for Export delivered F. A. S. Vessel New York, Philadelphia or Boston, in shipments of 200 lbs. and over.

PRINTED MATTER and ELECTROTYPES OF STOCK GOODS furnished customers without charge.

Quotations subject to change without notice. All agreements contingent upon strikes, fires, accidents and other conditions beyond our control. Charges made for dies and tools do not convey the right to remove them from our factory.



LINES CARRIED IN STOCK AT FACTORY AND NEW YORK STORE

STILLSON - WRI	ENCHES	AMATEUR - V	TSES
ADJUSTABLE "S"	66	CHAMPION	6.6
COMBINATION	66	STANDARD	66
DROP-FORGED	4.6	MACHINISTS -	6.6
STEEL STAMPED	4.6	FARMERS	4.6
CROCODILE -	4.6	COACH MAKERS	6.6
ALWAYS READY	4.6	JEWELERS	6.6
"VIXEN" -		HAND	4.6
MALLEABLE -	44	COMBINATION ANVI	L "
HERCULES SCREW		WOOD WOKKERS	66

HOLLOW AUGERS, SPOKE POINTERS, AUGER HANDLES
BENCH STOPS, STEEL LATHE DOGS
COMBINATION PLIERS
BOX OPENERS

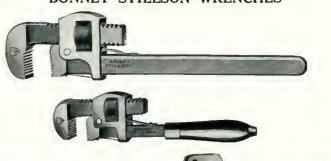
SPECIAL DROP-FORGINGS MADE FROM MODELS, DRAWINGS OR BLUE PRINTS







BONNEY STILLSON WRENCHES



Jaw

Wooden Handle

BONNEY STILLSON WRENCHES are all forged from the highest grade tool steel, and are interchangeable with similar wrenches. Each wrench is thoroughly tested and is absolutely warranted in

PRICE LIST

Length, open	6	8	10	14	18	24	36	48
Takes pipe	1 to 1/2	1/8 to 3/4	1 to 1	1 to 11/2	1 to 2	1 to 21	1 to 31/2	1 to 5
Price, each	\$2.00	\$2.00	\$2.25	\$3.00	\$4.00	\$6.00	\$12.00	\$18.00
Extra jaws	.75	.75	,80	1.00	1.33	2.10	4.75	7.25
Extra frames	.35	.35	.40	.50	.55	.80	1.30	1.50
Wood handles	.16	.16	.18	25	.28			
Steel handles	.95	.95	1.10	1.45	2.10	3.20	6.40	9.25
Nuts	.11	.11	.14	.17	.22	.85	.55	.95
Springs	.10	.10	.10	.10	.10	.11	.13	.13
No. of springs each wrench.	1	1	2	2	2	3	1	1
Frame pins	.03	.03	.04	1 .04	.04	.04	. 05	.05
Spring pins.	.01	.01	.02	.02	.02	.02	.02	.02
End nuts	.15	.15	.20	20				
Ferrule	.10	.10	.12	.15		1		

6" to 24" sizes inclusive, packed ½ doz. in a wooden box. Larger sizes packed loose. Steel handle wrenches made in all sizes. Wooden handle wrenches made 6" to 18", inclusive.

EXPORT PACKING OF STILLSON WRENCHES

Size	No. to Case	Net Wt. lbs.	Gross Wt. lbs.	Measurements
6"	72	24	28	13 x 7 x 8
8"	72	47	52	$16 \times 8\frac{1}{2} \times 9\frac{1}{2}$
10"	72	108	122	$22\frac{1}{4} \times 12\frac{7}{2} \times 14$
14"	72	204	224	$24\frac{1}{2} \times 15\frac{3}{4} \times 15\frac{3}{1}$
18"	54	243	267	$21\frac{1}{2} \times 15 \times 18$
24"	24	200	221	27 x 13 x 15
24" 36"	6	90	100	$35 \times 8\frac{1}{2} \times 6\frac{1}{2}$
48"	6	144	160	$45 \times 10^{\frac{7}{2}} \times 7^{\frac{7}{4}}$







BONNEY ADJUSTABLE "S" NUT WRENCH



BONNEY Adjustable "S" NUT Wrenches are designed, primarily, for utility, but in their construction every care has been taken to produce not only strength and durability, but also balance and beauty. The sliding jaw is a drop-forging and the long or fixed jaw is made of the highest grade of malleable iron. All parts are interchangeable. The handle is finished in bright black enamel and the jaws are polished.

PRICE LIST

Size, inches	6	8	10	12	14
Opens to	\$7.20= 5 lbs.	1" \$9: 60 12 lbs.	1 ³ / ₈ " \$12.00 21 lbs.	15'' \$15.00 32 lbs.	2" \$21.00 56 lbs.

8.00 10.00

EXPORT PACKING OF ADJUSTABLE "S" NUT WRENCHES

Size, in.	No. to case	Net Wt. lbs.	Gross Wt. lbs.	Measurements
6	24 doz.	120	141	22½ x 10 7 x 16
8	24 "	288	333	$35\frac{3}{4} \times 16\frac{1}{2} \times 13$
10	15 "	315	360	$35\frac{3}{4} \times 16\frac{7}{2} \times 13$
12	6 "	192	230	$24\frac{1}{4} \times 15\frac{3}{4} \times 15$
14	3 "	168	203	32 x 17 x 9

NET PRICE LIST OF PARTS FOR ADJUSTABLE"S" NUT WRENCHES

Size, inches	6	8	10	12	14
Jaw	\$0.10	\$0.12	\$0.15	\$0.25	\$0.35
Thumb Nut Screw for Thumb	.06	,06	.10	.11	.12
Nut	.03	.03	.03	.03	.03





BONNEY ADJUSTABLE "S" PIPE WRENCH



BONNEY Adjustable "S" Pipe Wrenches are similar in material and finish to the Adjustable "S" Nut Wrenches described on the opposite page. The sliding jaw, however, is milled with teeth correctly cut to grip both pipe and round iron, and the long jaw is constructed on an angle of correct degree to prevent locking of the wrench when used on particularly difficult work. As in the case of the Adjustable "S" NUT Wrench the parts are interchangeable and the milled jaw can be replaced without difficulty.

PRICE LIST

Size, inches	6	8	10	12	14
Grips	Wire to	½ Wire to	½ Wire to	½ Wire to	½ Wire to
Price, per doz Weight per doz.	³ / ₈ pipe \$7.2 0 . 5 lbs.	³ pipe \$9.0 07 13 lbs.	1 pipe \$12.00 22 lbs.	1¼ pipe \$15.00 33 lbs.	1½ pipe \$21.00 57 lbs.

8.00 10.00

EXPORT PACKING OF ADJUSTABLE "S" PIPE WRENCHES

Size	No. to case	Net Wt., lbs.	Gross Wt., lbs.	Measurements
6	24 doz.	120	141	221 x 10 x 16
8	24 ''	312	357	$35\frac{3}{4} \times 16\frac{1}{2} \times 13$
10	15 "	330	375	$35\frac{3}{4} \times 16\frac{1}{2} \times 13$
12	6 "	198	236	$24\frac{1}{4} \times 15\frac{3}{4} \times 15\frac{3}{4}$
14	3 "	171	206	32 x 17 x 9

NET PRICE LIST OF PARTS FOR ADJUSTABLE "S" PIPE WRENCHES

Size, inches	6	8	10	12	14
Jaw Thumb Nut	\$0.15 .06	\$0.17 .06	\$0.20 .10	\$0.30 .11	\$0.40 .12
Screw for Thumb Nut.	.03	.03	.03	.03	.03





BONNEY COMBINATION PIPE AND NUT WRENCH



No. 43 Bright, Short Nut

This wrench is strongly and earefully made, is thoroughly tested in every way and is warranted perfect in material and workmanship. The long jaw and shank is a solid drop-forging. The slide is of highest grade malleable iron and the toggle is drop-forged of special analysis tool steel.

All parts are properly hardened and are interchangeable with BONNEY and similar wrenches. It is especially adapted to the uses of Farmers and Oil-well Operators, to whom the added weight of separate tools would be particularly undesirable.

LIST PRICE, No. 43, SHORT NUT

Size	Capacity	Price per doz.	Weight per doz
8"	1" to 3"	\$21.00	15 lbs.
10"	1" " 1"	23.00	25 "
12" 15"	½" " 1¾"	26,00	36 "
15"	½" " 2½"	37.00	52 "
18"	1 " " 3"	66.00	81 "

All sizes except 18 in. packed $\frac{1}{2}$ doz. in a wooden box.

LIST PRICE, No. 44, BLACK, SAME AS ABOVE

Combination Pipe and Nut Wrenehes packed for Export as follows:

Size	No. to Case	Net Wt. lbs.	Gross Wt. lbs.	Measurements
8"	6 doz.	96	115	18 x 8 x 20
10''	6 "	162	188	32 x 12 x 9
12"	6 "	240	275	35 x 14 x 10
15"	4 "	216	256	29 x 18 x 12
18"	2 "	180	220	$38\frac{1}{4} \times 21 \times 8\frac{1}{4}$







BONNEY COMBINATION PIPE AND NUT WRENCH



No. 45, Bright, Long Nut

Combination Wrenches Nos. 45 and 46 arc exactly the same in every particular as Nos. 43 and 44, with the one exception that the adjusting nut is made in the form of a knurled sleeve instead of the short nut. The knurled sleeve forms a covering for the screw on which the adjusting nut operates and thus protects the thread from bruises and other damage which might easily happen to the screw, by either dropping the wrench on stone or cement or by dropping some heavy article on the wrench.

LIST PRICE No. 45, LONG NUT

Size	Capacity	Price per doz.	Weight per doz
8"	1" to 3"	\$23,00	16 lbs.
10" 12" 15"	i" " i"	25.25	25 "
12"	$\frac{1}{2}$ " " $1\frac{3}{4}$ "	28.50	38 "
15"	1" " 21"	40,50	55 "
18"	<u></u>	72.00	84 "

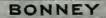
All sizes except 18 in. packed $\frac{1}{2}$ doz. in a wooden box.

LIST PRICE No. 46, BLACK, SAME AS ABOVE

Combination Pipe and Nut Wrenches packed for export as follows:

Size	No. to Case	Net Wt. lbs.	Gross Wt. lbs.	Measurements
8"	6 doz.	96	115	18 x 8 x 20
10"	6 "	162	188	32 x 12 x 9
12"	6 "	240	275	35 x 14 x 10
15"	4 "	216	256	29 x 18 x 12
18"	2 "	180	220	$38\frac{1}{4} \times 21 \times 8\frac{1}{4}$

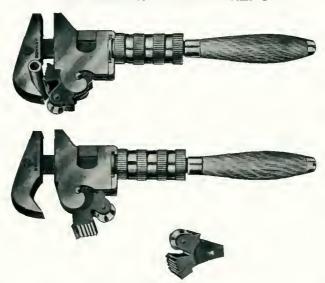








THE "MASTERPIECE" WRENCH



Combination Pipe and Nut Wrench and Pipe Cutter

The MASTERPIECE Wrench is similar in construction to the BONNEY Combination Wrenches, but is designed to do even more work than the Combination Wrench for the reason that it contains one additional very useful feature, namely, the PIPE CUTTING ATTACHMENT. This attachment consists of a drop-forged toggle, milled and drilled to hold firmly an eccentric cutting wheel. The eccentric construction of the wheel makes it possible to cut through the average pipe in a very few turns, as every time the ligh side of the wheel comes in contact with the pipe it makes a deep cut, while a half turn of the adjusting nut, when the wheel is on the low side, will tighten the cutter for the next turn.

The toggle also contains the pipe jaw which is carefully milled and hardened to withstand the roughest use and abuse. When the toggle is in position to turn pipe it rests against a strong spring, which gives it the same action as an individual pipe

The long jaw is made of drop-forged steel and the frame of highest grade malleable iron. Both are correctly hardened and warranted to be absolutely perfect in both material and workmanship.

BLACK No. 1

									Price Per Doz.	Wt. P	er Doz.
10"	adjustable "	to pipe	from	1//	to	1"	in	diam.	 \$26.00	28	lbs.
12"	66	76.7	6.6	111	66	11/1	66	66	 29.00	42	4.6
$-15^{\prime\prime}$	66	44	46	111	6.6	$1\frac{1}{2}''$	66	66	 41.00	57	66

BRIGHT No. 2

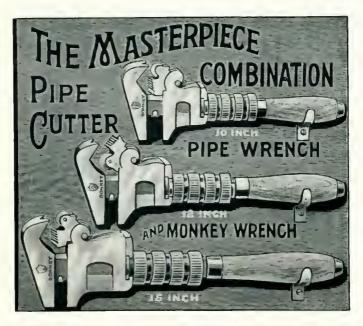
10"	adjustable "	to pipe	from	1//	to	1"	in	diam.	 Price Per Doz. \$27.50		er Doz. lbs.
$12^{\prime\prime}$	66	· 46	6.6	111	66	11/1	66	6.6	 31.00	42	4.6
15''	44	6.6	66	<u>1</u> "	46	$1\frac{1}{2}''$	6.6	4.6	 44.00	57	66







For the convenience of our customers we will furnish free the attractive display board (14 x 16 in.) shown below. This board is a very helpful salesman when used for window or counter display.



Price per set of one each, 10, 12 and 15 inch Bright finish Black " 88.

$\$8.55 \\ 8.00$

EXPORT PACKING OF MASTERPIECE WRENCHES

Size	No. to Case	Net Weight	Gross Weight	Measurements
10"	6 doz.	180 lbs.	206 lbs.	32 x 12 x 9
12"	6 "	252 "	287 "	35 x 14 x 10
15"	4 "	240 "	283 "	29 x 18 x 12







BONNEY "THIN" WRENCHES



BONNEY "Thin" Wrenches are especially designed for Lock Nuts, Check Nuts, and for Automobile use. They are stamped from special analysis steel and are hardened all over. They are made in two finishes—Polished and Niekel Plated, and Semi-finished or Black with polished heads.

No.	Openings Inches	Length	Weight per doz.	Price each Semi-fin.	Price each Nickel Plated
110	1 & 5 16	43"	11 oz.	\$0.10	\$0.15
120	3 & 7 8 & 76	43" 5"	1 lb. 7 oz.	.14	.21
130	1 & 9 16	$rac{6\frac{1}{4}''}{7rac{3}{4}''}$	2 " 3 "	.18	.27
140	5 & 3 4	$7\frac{3}{4}''$	5 " 1 "	.25	.37
150	7 & 1	95"	6 " 5 "	,33	.50









BONNEY "THIN" WRENCHES



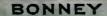
BONNEY "Thin" Wrenches are packed in sets as follows:

Set No. 1.—Five Wrenches, one each, 110-150, ten openings, from $\frac{1}{4}$ to $\frac{1}{4}$ semi-finished, packed in canvas case. Price per set	\$1.25
Set No. 2.—Same as No. 1, packed in cardboard box. Price per sct .	\$1.00
Set No. 3.—Same as Set No. 1, polished and nickel plated, packed in canvas case. Price per set	\$1.75
Set No. 4.—Same as Set No. 3, in cardboard box. Price per set	\$1.50
Weight per set either in cardboard box or canvas ease, 1 lb. 6 oz.	

EXPORT PACKING OF BONNEY "THIN" WRENCHES

No. of sets to ease	Net Weight	Gross Weight	Measurements
100	138 lbs.	173 lbs.	24 x 15 x 15









BONNEY HERCULES SCREW WRENCHES



Bonney Hercules Screw Wrenches are made of the best grade of steel and malleable iron. The long jaw is a drop-forging and the sliding jaw and handle frame are malleable iron. All parts are carefully machined to an accurate fit and are interchangeable. The jaws are case hardened to withstand wear.

These wrenches are warranted against any defeets in workmanship and material and against breakage from any cause, except abuse.

They are wrapped one half dozen to a bundle in sizes 6'' to 12'', inclusive. 15'' and 18'' are wrapped one third in a bundle and the 21'' are wrapped one in a bundle.

PRICE LIST AND DOMESTIC PACKING

Size	6" ⁷ 8 ½ lbs. 58	8" 1½" 15 102	10" 1 ³ / ₄ " 24 165	12" 2½" 39 265	15" 2¾" 57 190	18" 3½" 82 184	21" 4 ¹ / ₄ " 104 124
Black, per doz	\$10.00	\$12.00	\$14.00	\$18.00	\$24.00	\$32.00	\$39.00

EXPORT PACKING

Size	Quantity	Net Wt., lbs.	Gross Wt., lbs.	Measurements
6"	6 doz.	51	61	$17 \times 8\frac{5}{8} \times 7\frac{1}{4}$
8" 10"	6 "	90 144	110 175	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
12"	6 "	234	275	26 x 14 ³ / ₈ x 11
15" 18"	3 "	171 164	200 184	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
21"	ĩ "	104	124	$24\frac{3}{4} \times 14 \times 6\frac{1}{2}$







BONNEY DROP-FORGED WRENCHES



Unfinished Wrench Forgings are milled only, not hardened.



Semi-finished Wrench Forgings are milled, hardened and ends are polished.



Finished Wrench Forgings are milled, polished all over, ease hardened, mottled and lacquered, heads bright.

Drop Forged Wrenches milled to order without extra charge in lots of 50 or more of a size; special wrenches made to order from models or drawings.

In ordering, be sure to specify finish desired. When no finish is specified, we will ship Semi-finished Wrenches.





SINGLE END ENGINEERS' WRENCHES

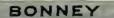


For U. S. Standard Hexagon Nuts Drop-Forged of Bar Steel 15° Angle

	For U.S. Standard	Opening	Extreme	Thickness	PI	RICE EAG	СН	
No.	Nut; Size Bolt	Nut; Milled Length I		Head	Unfin- ished	Semi- finished	Finished	No.
00	1	5 16	21	3	\$0.08	\$0.12	\$0.16	00
0	3	13	27	7	.09	,13	.18	0
	10	1 2	33	1 2	.10	.15	.20	
2	35	19 32 11	43	3 6 7 2 1 4 9 2 2 5 6 1 3 2 2 1 3 2 2 1 3 2 2 3 2 3 2 3 2 3 2	.12	.18	.24	2
3	3		5.5	5_5_	.14	.21	,28	3
4	7	25	61	11	.17	.25	.34	4
5	10	7 2	71	13	.20	.30	.40	5
6	79	16 25 32 7 8 31 32	83		.26	,39	,52	6
7	5 8	1 1 6	$9\frac{\circ}{4}$	16 1 2 9	.32	.48	.64	1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9	16 3 16 4 5 6 7 16 12 9 16 18 21 4 7 18	$1\frac{1}{16}$ $1\frac{1}{4}$ $1\frac{7}{16}$ $1\frac{5}{8}$	2127834344564566672123814456677123814418	9	.42	.63	.84	8
	78	$1\frac{7}{16}$	13	21	.58	87	1.16	9
10	1	$1\frac{5}{8}$	$14\frac{3}{4}$	3	,75	1.13	1.50	10
11	1 1/8	$1\frac{13}{16}$	163	27	. 1.00	1,50	2.00	11
12	1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	2	181	29.	1.25	1.88	2.50	12
13	1 3	$2\frac{3}{16}$	20 '	1	1.62	-2.43	3.24	13
14	$1\frac{1}{2}$	23	22	1	2.00	3.00	4.00	14
15	1 5 8	216	21	1.	2.50	3.75	5.00	15
16	13/4	23	251	132	3.00	4.50	6.00	16
$16\frac{1}{2}$		218	. 27	$1\frac{7}{32}$	3.70	5.55	7.40	16
17	2	31	203	4 (1)	4.40	6:60	8.80	17
18	$2\frac{1}{4}$ $2\frac{1}{2}$ $2\frac{3}{4}$	ea 1	33 V	132	6.00	9.00	12.00	18
19	$2\frac{1}{2}$	$ \begin{array}{r} 3\frac{7}{8} \\ 4\frac{1}{4} \\ 4\frac{5}{8} \end{array} $	37	1 5/8	7.60	11.40	15.20	19
$19\frac{1}{2}$	23	41/4	39	1 5/8	10.00	15.00	20.00	$19\frac{1}{2}$
20	3	45	41	$1\frac{7}{8}$	13.00	19.50	26.00	20
20A	$3\frac{1}{4}$	5	43	1 7/8	16.00	24.00	32.00	20.
20B	$3\frac{1}{4}$ $3\frac{1}{2}$ $3\frac{3}{4}$	$\begin{array}{c c} 5\frac{3}{8} \\ 5\frac{3}{4} \\ 6\frac{1}{8} \\ 6\frac{7}{8} \\ 7\frac{5}{8} \end{array}$	51	1 32 1 58 5 5 7 6 7 16 7 16 7 16 7 16 7 16 7 16 7	22.00	33.00	44.00	201
20C	3 4	5 4	51	1 7 8	25.00	36.00	47.00	200
20D	4	$6\frac{1}{8}$	53	$1\frac{7}{2}$	28.00	39.00	50.00	201
20E	$4\frac{1}{2}$	$6\frac{7}{8}$	53	1 7 8	40.00	60.00	80.00	201
20F	5	78	53	1 %	45.00	65.00	85.00	20

Be particular when ordering to state whether unfinished, semi-finished or finished are wanted.









DOUBLE END ENGINEERS' WRENCHES



For U. S. Standard Hexagon Nuts. Drop-Forged of Bar Steel. 15° Angle.

	For U. S. Standard	Openings	Ex-	Thickness	PRI	CE E	ACH	
No.	Nuts; Size Bolts	Milled	treme Length	Head	Unfin- ished	Semi- finished	Fin- ished	No
21	18 & 16 18 & 16 18 & 4 316 & 4 316 & 4 316 & 5	5 & 13 16 & 32	$3\frac{1}{4}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$0.12	\$0.18	\$0.24	21
22	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5 & 1 13 & 1 32 & 1 32 & 32 1 & 32 1 & 16 1 & 16	4	64 & 4	.13	.20	.26	22
23	$\frac{3}{16} & \frac{1}{4}$	13 & 1	4	$\frac{7}{32} & \frac{1}{4}$.14	.21	.28	23
24	3 & 5 16 & 16	$\frac{13}{32}$ & $\frac{19}{32}$ $\frac{1}{2}$ & $\frac{19}{32}$	4 7 8	$\frac{7}{32}$ & $\frac{9}{32}$.16	.24	.32	24
25	5 & 3 16 & 3 16 & 3	1 & 19 2 & 32	$4\frac{7}{8}$ $5\frac{7}{8}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$.18	.27	.36	2
26	1 & 3 5 & 3 16 & 3 16 & 7 16 & 7	1 & 11 19 & 11 32 & 16	$5\frac{7}{8}$	$\frac{1}{4}$ & $\frac{5}{16}$.20	.30	.40	26
27	16 & 3	19 & 11 32 & 16	$\frac{5\frac{7}{8}}{6\frac{7}{8}}$	32 & 16	. 22	.33	.44	27
28	16 & 7 16	19 & 25 32 & 32	68	9 & 11 32 & 32	. 24	.36	.48	28
29	8 & 16	19 & 25 32 & 32 116 & 32 116 & 7 16 & 8 25 25 25 118 & 7	67	$\begin{array}{cccccccccccccccccccccccccccccccccccc$.26	.39	. 52	29
30	3 de 1/2	16 & 7	$7\frac{3}{4}$ $7\frac{3}{4}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$.28	.42	. 56	36
31	16 & 1	32 & 3	74	11 & 13 32 & 32	.30	.45	.60	3
32	7 & 16	25 & 31 32 & 32 7 & 31	83	32 & 7 16	.32	.48	.64	32
33	1 & 9 16	8 & 31 8	83	13 & 7 16	.36	. 54	.72	33
34	38 & 122 7 16 & 122 7 16 & 196 12 & 166 12 & 188 29 & 18	$\frac{7}{8}$ & $1\frac{1}{16}$	94	33 & 2	.40	.60	.80	34
35	9 & 5 16 & 5	116 & 255 116 & 78 125 & 8 255 & 312 255 & 312 255 & 312 78 & 116 312 & 116 312 & 116	$9\frac{3}{4}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$.44	.66	.88	3
36	9 & 3 16 & 4	$\frac{31}{32}$ & $1\frac{1}{4}$	$11\frac{1}{2}$	76 & 9	.51	.77	1.02	30
37	2 K 3	1 1 & 1 1 d	$11\frac{1}{2}$	½ & 9 16	.58	.87	1.16	37
38	12 & & 9 16 & & & 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$1\frac{1}{16} \times 1\frac{7}{16}$	7-13 ₂	16 & 9 16 & 9 1 & 16 2 & 21 2 & 21 4 & 21 2 & 2 & 21 2 & 2 & 21 2 & 2 & 2 2	, 65	.98	1.30	38
39	(本人)	$1\frac{1}{4}$ & $1\frac{7}{16}$ $1\frac{1}{4}$ & $1\frac{5}{6}$	1317	16 & 31	.76	1,14	1.52	39
40	3 de 1	11 & 15	15		.88	1.32	1.76	40
41	½ & 1	118 2 48	$15\frac{1}{2}$	21 k 3	1.00	1.50	2.00	4
42	7/8 & 1½	176 & 113	177	$\frac{21}{32} & \frac{27}{32}$	1.18	1.77	2.36	4.
43	1 & 1½ 1 & 1¼	15 & 113	417	& 27	1.36	2.01	2.72	4.
44	1 & 14	15 & 2. 113 & 2. 113 & 2. 113 & 2.3	19	27/ 6 32 32 6 32	1.55	2.33	3.10	4
45	$1\frac{1}{8} & 1\frac{1}{4}$	$\begin{array}{c} 1_{\frac{1}{6}} & & 2 \\ 1_{\frac{13}{16}} & & 2 \\ 1_{\frac{13}{16}} & & 2_{\frac{3}{16}} \\ 2 & & 2_{\frac{3}{16}} \end{array}$	19	$\begin{array}{c} \frac{27}{32} & \frac{29}{32} \\ \frac{27}{32} & \frac{1}{8} \\ \frac{39}{32} & \frac{1}{16} \\ \frac{29}{32} & \frac{1}{16} \end{array}$	1780	2.70	3.60	4.
46	18 & 18	1 16 & 2 16	21 21	32 & 1	2.05	3.08	4.10	40
47	14 & 18	2 4 16	21	32 & 1	2.30	3.45	4.60	4
48	14 & 12	2 & 2 5	23	$\frac{29}{32} & 1_{16}$	2.65	3.98	5.30	4
49	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$2\frac{3}{16} & 2\frac{3}{8}$	23	1 & 116	3,00	4.50	6.00	4
50	1 8 & 1 8	2 3 & 2 9 16	25	1 & 11/8	3.35	5.03	6.70	50
51	1 2 & 1 8	23 & 2 9 16	25	$1\frac{1}{16} & 1\frac{1}{8}$	3.80	5.70	7.60	5
52	1 k & 1 k 3 k 4 1 k 3 k 4 1 k	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	27	$1\frac{1}{16} & 1\frac{7}{32}$	4.25	6.38	8.50	5
53	1 8 & 1 3	2 16 & 24	27	$1\frac{1}{8}$ & $1\frac{7}{32}$	4.70	7.05	9.40	53
$53\frac{1}{2}$	1 8 & 1 7 8	$2\frac{9}{16} & 2\frac{13}{16}$	29	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5.30		10.60	53
54	$1\frac{7}{2}$ & $1\frac{34}{4}$ $1\frac{5}{5}$ & $1\frac{3}{4}$ $1\frac{5}{5}$ & $1\frac{7}{5}$ $1\frac{5}{5}$ & 2 $1\frac{34}{4}$ & 2 $1\frac{7}{5}$ & 2	$2\frac{9}{16} & 3\frac{1}{8}$	$31\frac{1}{2}$	1 1 & 1 3	5.90	8.85	11.80	54
55	1 4 & 2	24 & 34	$32\frac{1}{2}$	1 32 & 18	6.50		13.00	55
$55\frac{1}{2}$	18 & 2	$2\frac{15}{16} & 3\frac{1}{8}$	33	$1\frac{7}{32} & 1\frac{3}{5}$	7.35		14.70	55
56	$1\frac{3}{4}$ & $2\frac{1}{4}$	24 & 31	34	17 4 117	8.20	12.30	16.40	50
$56\frac{1}{2}$	18 & 21	$2\frac{15}{16} & 3\frac{1}{2}$	35	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9.05	13.58	18.10	50
57	2 & 21/4	$3\frac{1}{5}$ & $3\frac{1}{2}$	36	$1\frac{3}{8}$ & $1\frac{17}{32}$	10.25	15.38	20.50	57
$57\frac{1}{2}$	2 & 21	$3\frac{1}{8}$ & $3\frac{7}{8}$	37	13 & 15	11.50	17.25	23,00	57



SINGLE HEAD WRENCHES

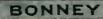


For Hexagon Cap Screws 15° Angle

All stock wrenches are milled to fit standard Hexagon cap screws. Larger or special sizes milled to order.

No.	For Hex, Head Cap Screw Diameter of Screws	Openings Finished	Length	Thick- ness of Head	Un- finished	Semi-	CH Sun Finished	No.
700	3 16	300	27	$\frac{7}{32}$	\$0.09	\$0.13	\$0.18	700
701	3 6 16 17 6 17 16 12 9 16 18 17 16 18 18 18 18 18 18 18 18 18 18 18 18 18	16	$3\frac{3}{4}$	1 4	,10	.15	.20	701
701A	16	1/2	33	140	, 10	,15	.20	701A
702	8_	2 916 558 314	43	9.22 3.5 6 1 13.22,54 6 2.5 6 4	.12	,18	.24	702
703	16	<u>3</u> 8	$\frac{5\frac{5}{8}}{6\frac{1}{2}}$	16	.14	,21	.28	703
704	1/2	34	62	32	. 17	, 25	.34	704
705	16	$\frac{13}{16}$	$7\frac{1}{2}$	64	,20	,30	.40	705
705A	5 8	78	7½ 83	64	.20	, 30	.40	705A
706	34	1	83	716	.26	.39	.52	706
707	7 8	1 1/8	$9\frac{1}{4}$	3 <u>1</u> 64	.32	,48	. 64	707
708	1	$1\frac{1}{4}$	$11\frac{1}{8}$	76	.42	,63	.84	708
708A	1 1 8	1 3	11%	161 644 9164 916222	.42	, 63	.84	708A
709	1}	$1\frac{1}{2}$	13	31	.58	.87	1.16	709
710	$1\frac{3}{8}$	$1\frac{1}{2}$ $1\frac{5}{8}$	143	3	.75	1.13	1,50	710









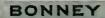
DOUBLE HEAD WRENCHES



For Hexagon Cap Screws 15° Angle

No.	For Hex. Head Cap Screws.	Openings	Length	Thickness	PRI	ICE EA	СН	No.
	Diameter of Screws	Finished		of Head	Unfin- ished	Semi- finished	Fin- ished	
21	1/8 & 3/6	5 & 3 16 & 5	$3\frac{1}{4}$	$\frac{5}{3.2}$ & $\frac{3}{16}$	\$0.12	\$0.18	\$0.24	721
22	1 A 1	16 & 16	4	32 & 4	.13	.20	.26	722
23	3 16 1 4	3 & 16	4	32 & 4	.14	.21	.28	723
23.4	3	5 & 76 38 & 16 38 & 2 18 & 2 8 & 16 76 & 2	4	3 2 & 1 3 2	. 14	.21	. 28	723.
24	16 & 3 16	3 & 16	178 187	$\frac{7}{32} & \frac{9}{32}$.17		.34	724
25	4 & 16	7 & ½	4 7 8	4 & 9	.18	.27	.36	725
25A	4 & 3	76 4 76	4 7 8	4 & 32	.18	.27	, 36	725.
25B	16 6 5	2 4 -16	48	$\frac{1}{4}$ & $\frac{9}{32}$.18	.27	. 36	725
26	16 & 16	3 4 5 5 16 6 5 16 6 5 5 5 5 5 5 5 5 5 5 5 5	5 8	10 16	.20	.30	.40	726
27	3 & 16 3 1 16 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6	$\begin{array}{c} \frac{9}{32} & \frac{16}{16} \\ \frac{9}{32} & \frac{11}{32} \\ \frac{5}{16} & \frac{11}{32} \\ \frac{5}{16} & \frac{25}{6} \end{array}$. 22	.33	. 44	727
28	S & & 1 7) 16 & 3	08	32 & 32	.24	.36	.48	728 729
29 30	16 4 2	A SECTION AND	08	$\frac{5}{16} \times \frac{11}{32}$.26	.39	.52	730
31	10 00 10	3 & 13 3 & 16 3 & 7 4 & 7 16 & 8	S90	$\frac{5}{16}$ & $\frac{25}{64}$ C	.28	.42	.60	731
31A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 & 13 3 & 16 3 & 7	7 4 7 4 7 3	$\begin{array}{c} \frac{11}{32} & \frac{25}{64} \\ \frac{11}{32} & \frac{25}{64} \end{array}$	30	.45	.60	731
31B	9 16 & 8	13 & 7	73	$\begin{array}{c} 11 \\ 32 \\ 4 \\ 64 \\ 11 \\ 32 \\ 4 \\ 64 \\ 64 \\ 11 \\ 32 \\ 4 \\ 7 \\ 16 \\ \end{array}$.30	.45	,60	731
32	16 & 8	13 & 7 16 & 8	83	32 & 64 11 32 & 7 16	.32	.48	.64	732
32A	9 & 4 16 & 4	13 & 1 16 & 1	$8\frac{3}{4}$	11 . 7	.32	.48	.64	732
33	16 & 4 5 & 3	16 & 1 2 & 1	83	$\frac{11}{32} & \frac{7}{16} \\ \frac{25}{64} & \frac{7}{16}$.36	.54	.72	733
34	96 & 3147878	\$ & l \frac{7}{8} & 1\frac{1}{8}	94	25 & 7 64 & 16 25 & 31 64 & 64 7 16 & 31	.40	.60	.80	734
35	3 & 7	1 & 11/8	94	7 & 31 16 & 54	.44	,66	.88	735
36	2 & 3 96 & 3 58 & 3 58 & 3 58 & 78 58 & 1 58 & 1 58 & 1	1 & 11/4	115	76 & 76	.51	.77	1.02	736
37	7 & 1	$1\frac{1}{8}$ & $1\frac{1}{4}$	$\frac{11\frac{5}{8}}{11\frac{5}{8}}$	31 & 9 64 & 16	.58	.87	1.16	737
38	7/8 & 11/8	1 8 & 18	$13\frac{1}{2}$	76 & 16 31 & 16 64 & 16 12 & 32 16 & 32 16 & 32 16 & 32 16 & 32	.65	.98	1.30	738
39	1 & 11/8	11/4 & 13/4	131	9 & 21	.76	1.14	1.52	739
39A	1 & 11	$1\frac{1}{4}$ & $1\frac{1}{2}$	$13\frac{1}{2}$	9 & 21 16 & 32	.76	1.14	1.52	739.
39B	18 & 14	$1\frac{3}{8}$ & $1\frac{1}{2}$	$13\frac{1}{2}$	$\frac{9}{16}$ & $\frac{21}{32}$.76	1.14	1.52	739









DOUBLE HEAD "S" WRENCHES



For U. S. Standard Nuts, 2210 Angle.

In Stock with openings for U. S. Standard Finished Nuts; Whitworth Standard and Metric Measure to order.

	For U. S.				PR	ICE EAG	.H	
Num- ber	Standard Nuts; Size Bolts	Openings, Milled	Extreme Length	Thickness Heads	Un- finished	Semi- finished	Fin- ished	Num- ber
661A 661B 661C	1 & 3 5 & 4 5 & 4 1 & 4	16 & 13 16 & 12 16 & 12 13 & 2	.g. .g. .g.	9 32 9 32 9 32	\$0.13 .13 .13	. 50 . 50 . 50 . 50	\$0.26 ,26 ,26	661A 661B 661C
662A 662B 662C	76 & 16 1 & 16 1 & 16 1 & 2		5 5	ET	17 17 17	. 26 . 26	. 94 . 94 . 94	662A 662B 662C
663A 663B 663C	76 & 3 16 & 16 2 & 16	12 x 11 11 11 11 11 11 11 11 11 11 11 11 1	0 to 6	ed	5.5 5.5 5.5	. 33 . 33	. 44 . 44 . 44	663A 663B 663C
664A 664B 664C	1	11 & 8 25 & 6 37 & 6 37 & 32	72 71 75	16 16 16 7	. 28 . 28 . 28	. 49 . 49 . 49	.56 .56	664A 664B 664C
665A 665B 665C	1 & 16 1 & 5 2 & 5 16 & 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9 9 9		.36 .36	. 54 . 54 . 54	.72 .72 .72	665A 665B 665C
666A 666B 666C	76 & 4 5 & 4 5 & 5 8 & 5	$\begin{array}{c} \frac{31}{32} & \& & 1\frac{1}{4} \\ 1\frac{1}{16} & \& & 1\frac{1}{4} \\ 1\frac{1}{16} & \& & 1\frac{7}{16} \end{array}$	$10\frac{1}{2}$ $10\frac{1}{2}$ $10\frac{1}{2}$	1 6 9 1 6 4 1 6	$.48 \\ .48 \\ .48$. 72 . 72 . 72	.96 .96	666A 666B 666C
667A 667B 667C	3 & 1 3 & 1 5 & 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	15 15 15	\$7 (0 40) (\$1 (0) (1)	.72 .72 .72	1.08 1.08 1.08	1.44 1.44 1.44	667A 667B 667C
668A 668B 668C	1 & 1 h 1 & 1 h 1 & 1 h	$1_{\frac{17}{6}}$ & $1_{\frac{13}{46}}$ $1_{\frac{5}{6}}$ & $1_{\frac{13}{46}}$ $1_{\frac{5}{6}}$ & 2	14 14 15	03 4 22:4 20(4	$1.10 \\ 1.10 \\ 1.10$	1.65 1.65 1.65	5.30 5.30	668A 668B 668C







DOUBLE HEAD "S" WRENCHES



For Hexagon Head Cap Screws, $22\frac{1}{2}^{\circ}$ Angle

In stock with openings milled for Hexagon Head Cap Screws; Whitworth Standard and Metric Measure to order. Openings for U. S. Standard Nuts, Square Head.

Num-	For Hexagon Head	Openings,	Extreme	Thickness	PRI	CE EAG	111	Num
ber	Cap Screws; Diameter Screws	s; Milled L	Length	Heads	Un- finished	Semi- finished	Fin- ished	ber
671A 671B 671C 671D	1 A 16 2 A 16 2 A 1 1 A 1 1 E A 1	16 A 16 0-	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	32 9 32 32 32 32 32	\$6.13 .13 .13 .13	\$0.20 .20 .26 .20	\$0.26 .26 .26 .26	671A 671B 671C 671D
672A 672B 672C 672D		BSO			.17 .17 .17 .17	. 26 . 26 . 26 . 26	. 34 . 34 . 34 . 34	672A 672B 672C 672D
673A 673B 673C 673D	16 A 34	To A	Seid	In 15	. 22 . 22 . 22	.33 .35 .33 .33	.44 .44 .44	673A 673B 673C 673D
674A 674B 674C	1 de 16 12 de 5 2 de 5 3 de 5 16 de 5	4 & 116 4 & 7 16 & 7 16 & 8	7 1/2 7 1/2 7 1/2	7 16 7 16 7 16	. 28 . 28 . 28	.42 .42 .42	.56 .56 .56	674A 674B 674C
675A 675B 675C 675D	15 & 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 & 1 3 & 1 3 & 1 4 & 1 1 & 1 1	9 9 9		.36 .36 .36	.54 .54 .54	.72 .72 .72 .72	675A 675B 675C 675D
676A 676B 676C	3 & 1 7 & 1 7 & 1 8 & 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 16\frac{1}{2} \\ 16\frac{1}{2} \\ 10\frac{1}{2} \end{array}$	*** **** ****	.48 .48 .48	.72 .72 .72	.96 .96	676A 676B 676C
677A 677B 677C	1 & 11 1 & 11 11 & 11	11 & 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 12 12	0.00	.72 .72 .72	1.08 1.08 1.68	1.44 1.44 1.44	677A 677B 677C





DOUBLE HEAD "S" WRENCHES



For Set Screws and Square Head Cap Screws, $22\frac{1}{2}^{\circ}$ Angle

In stock with openings for Set Screws and Square Head Screws; Whitworth Standard and Metric Measure to order.

Num- ber	For Set Screws;	For Square Head Cap	Openings, Milled	Extreme Length	Thick-				Num-3
Del	Sizes	Screws; Diameter Screws	Mined Length		Heads	Un- Semi- finished finished ished		Dei	
81A	1 & 5 16 16 16 16 16 16 16 16 16 16 16 16 16	1	1 & 5 16 16 16 16 16 16 16 16 16 16 16 16 16	4	3.2 3.3	\$0.13	\$0.20	\$0.26	681A
81B 81C	4 4		1 & 3	4	1/3	. 13	.20	. 26	681B 681C
81D	10 & 8 10 & 7	1	Ye & s	4	17	.13	.20	. 26	681 D
82A	16 & 7 16 & 7 1 & 7	2 . 7 .5	16 & 16 1 & 16	75	4 3. 37	.17	.26	. 34	682A
82B	1 & 16	4 4 16	1 4 10	- L	T.	.17	. 26	.34	682B
82C	7 t 2	A 2 3	7 4	1 6	100	.17	. 26	.34	682C
82D	7 & 2 16 & 2 16 & 16 2 & 16	A CALL	1 4 2	5	10	• .174	. 26	.34	682D
83A	16 & 16 2 & 16 3 & 5	17,11	7 4 14	61 7	-1	7 (22)	. 33	.44	683A
83B	2 & 16	4 4	1 4	61	30	1.22	.33	. 44	683 B
83 C	76 & \$	7 d	THAT	S (61)	40	. 22	.33	.44	683 C
83 D	16 00 3	The de The		D 61	i	22	.33	. 44	683 D
84 H	16 & a	100	W & 3		7	.28	.42	.56	684H
84A	16 %	1 A 14	1 4 11	71	12	. 28	.42	.56	684A
84B	5 & 3	1 4 16	4 & 1	74	7.0	. 28	. 42	. 56	684B
84 K	0 & 4 I		16 & 4 16 16 16 16 16 16 16 16 16 16 16 16 16	7 7 1 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1	7 16 17 17 17 17 17 17 17 17 17	. 28	.42	.56	684K
84 C		16 & 8 16 & 4	11 4 3	74	70	. 28	. 42	.56	684 C
84D		16 & 2	12 4 1	7 4	75	. 28	.42	.56	684D
85 A	2 & 7	1 4 1	1 4 1	9	1	.36	. 54	.72	685A
85B	2 & 7 2 & 1 2 & 1		2 4 1	9	1/2	. 36	.54	.72	685B
85 C	i & 1		7 & 1	9	1	. 36	. 54	.72	685 C
86A		1 & 1	2 & 11	101	16	. 48	.72	.96	686Λ
86B	7 & 11	* & ** * & *	å & 1 å	101	16	.48	.72	. 96	686B
86C		3 & l	1 a 12	101	16	.18	72.	. 96	686C
86 D	1 & 1}		1 & 1	104	16 16 16 16 16	48	72 1	. 96	686 D
86E	1 & 14		1 & 1½ .	10	b .7 a 1	.48	72	.96	686E
87A	11 & 11	1 4 1	1 8 . & 1 4	12		45-	1.08	1.44	687A
87B			1 4 1	15	8	.72	1.08	1.44	687 B
87C		1 & 11	11 & 12	.12	á		7 1.08	1.44	687 C
88A		1 & 11	12 & 13	14	2	1.10	1.65	2.20	688A 688B







DOUBLE HEAD SET SCREW WRENCHES



15° Angle

			20				
	Set Screw	Varhaana	Thickness	PF	ICE EAC	CH	
No.	Sizes	Extreme Length	of Heads	Un- finished	Semi- finished	Finished	No.
65	3 & 1 16 & 1	$3\frac{3}{4}$	$\frac{\frac{3}{16}}{\frac{3}{16}}$	\$0.13	\$0.20	\$0.26	65
66	3 & 5 16 & 16	$3\frac{3}{4}$	3 16	.13	.20	.26	66
67	1 & 5 16	$4\frac{1}{2}$	1	.15	.23	.30	67
68	1 & 3 16 & 3	41/2	14	.15	.23	.30	68
69	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$5\frac{5}{16}$ $5\frac{5}{16}$	5 16	.18	.27	.36	69
70	5 & 7 16 & 7	5_{16}^{5}	5 16	.18	.27	.36	70
71	$\frac{3}{8}$ & $\frac{7}{16}$	$6\frac{1}{16}$	3 8	. 22	.33	.44	71
72	3 & 1 8 & 2	$6\frac{1}{16}$	5 16 5 16 3 8 3 8	.22	.33	.44	72
73	7 & 1 2	613	7 16 7	.27	.41	.54	73
74		616	7 16	.27	.41	.54	74
75	1 & 9 16	7.5	V () -	.33	. 50	. 66	75
76	1 4 5	75		.537	.50	.66	76
77	16 4 5	916	16	.40	.60	.80	77
78	16 & 10	918	7 - 16	.40	.60	.80	78
79	16 dd 4 5 dd 3	10 9	- V & C.	48	.72	.96	79
80	5 & 7 3 & 7	10 9 16	8	(1.48/	72	.96	80
81	916 d. &	$12\frac{1}{16}$	3 4	.58	- 1.87	1.16	81
82	3 & 1	$12\frac{1}{16}$	34	.58	.87	1.16	82
83	7 & 1	125	7 8	.68	1.02	1.36	83
84	7 & 11	125	7 8	. 68	1.02	1.36	84

TRIPLE HEAD WRENCHES



	D II C	D	Thick-	PR	ICE EAC	CH	
No.	For U.S. Standard Nuts, Size Bolt	For Set Screws Length	ness	Un- finished	Semi- finished	Finished	No.
894A 894B 894C 894D 894E	16, 16, 2 16, 16, 2 3, 16, 1	Rev 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	C Carrie sile	\$0.28 1.28 28 .28 .28	\$0.42 .42 .42 .42 .42 .42	\$0.56 .56 .56 .56 .56	894A 894B 894C 894D 894E







DOUBLE HEAD TOOL POST WRENCHES



For U. S. Standard Nuts and Set Screws Unfinished wrenches have openings milled and holes broached

	U. S. S	End for standard out	Closed End for	Extreme	Thick-	PR	ICE EA	ACH	
No.	Size Bolt	Opening Milled	Set Screw.		ness of Heads	Un- finished	Semi- finished	Finished	No.
124	3 8	11	1,6	$6\frac{1}{2}$	1 & 5	\$0.25	\$0.38	\$0.50	124
129	1/2	7 8	7 16	7	9 & 5 16 & 8	.30	.45	.60	129
130	1/2	7 8	1/2	7	16 & 5	.30	.45	.60	130
131	1/2	7 8	9 16	7	9 & 5 9 & 5 16 & 5 16 & 9	.30	.45	.60	131
132	1/2	78	5	7	16 & 16	.30	.45	.60	132
139	5 8	$1\frac{1}{16}$	5	$7\frac{1}{2}$	5 de 5	.35	.52	.70	139
140	5	$1\frac{1}{16}$	3	8	11 & 11	.40	.60	.80	140
143	3 7	11	3	9	$\frac{11}{16} & \frac{11}{16}$.50	.75	1.00	143
144	3 4	11	7	9	3 & 3	.50	.75	1.00	144

SINGLE HEAD SET SCREW WRENCHES



Straight Opening

Any one of these wrenches can be milled one size larger or smaller if desired

No.	For Set	Extreme	Thickness	P	RICE EAG	CH	
140.	Screw, Size	Length -	of Head	Un- finished	Semi- finished	Finished	No.
280	$\frac{3}{16}$	3	3 16	\$0.08	\$0.12	. \$0.16	280
281	1	334	32	. 10	15	.20	281
282	5 16 3 8	41	14	.12	.18	.24	282
283	8	$5\frac{3}{8}$	16 3	. 15	.23	.30	283
284	16	6	3 8_	. 20	.30	.40	284
285	2	$6\frac{3}{4}$	716	.25	.38	.50	285
286	9 16 5	$7\frac{1}{2}$	1/2	.27	.41	.54	286
287	8 8	8	16	.30	. 45	. 60	287
288	3 4	9_	58	.35	. 53	.70	288
289	8	101	11 16	.42	.63	.84	289
290	1	12	4	.50	.75	1.00	290
291	11/8	12	13	. 60	.90	1.20	291







DOUBLE HEAD SET SCREW TOOL POST WRENCHES



Holes broached. Closed end. 22½° angle. Open end straight.

	Open End	Closed End	Length	Pl	RICE EAC	СН	
No.	for Set Screws, Size, Inches	for Set Screws, Size, Inches	Over All, Inches	Un- finished	Semi- finished	Finished	No.
201	PS(LE	To:	\$0.21	\$0.32	\$0.42	201
202 203 204	F 18 7 7	12 - 12 - 17 - 17 - 17 - 17 - 17 - 17 -	6 63	.23 .23 .30	.35 .35 .45	.46 .46 .60	202 203 204
205 206	116	515(d) 2014	$-\frac{6\frac{3}{4}}{7\frac{1}{2}}$.30 .35	.45 .52	.60 .70	205 206

SINGLE HEAD BOX WRENCHES

22½° Angle



Unfinished Wrenches have Broached Opening

	For		Thickness	PI	PRICE EACH			
No.	Set Screw, Size	Length	of Head	Un- finished	Semi- finished	Finished	No.	
107	OB	SOL	ETE	\$0.09	\$0.12	\$0.18	107	
108 109 110	eeiRe	33 33 41 41	32 5 16 3	.10 .11 .13	.15 .17 .20	.20 .22 .26	108 109 110	
111 112	7 16 1	4 7/8 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7 16 15 32	.16 .19	.24 .28	.32	111 112	
113 114 115	16	$\frac{6\frac{1}{4}}{7}$	9 16 5	.22 .26 .30	.33 .39 .45	.44 .52 .60	113 114 115	
116 117	1 7 8	9	11 16 3	.36	.54 .66	.72	116 117	





CHECK NUT WRENCHES



15° Angle, Single Head, Very Thin For Check, Jam or Lock Nuts

	For U. S. Standard	Open- E		Thick-	PR	RICE EAG		
No.	Nut; Size Bolts	mg, Milled	treme Length	ness Head	Un- finished	Semi- finished	Finished	No.
800	5 16 3	11	C41-	11 64	\$0.11_	\$0.17	\$0.22	800
801 802	8	16 25	518	16	.13.	.20	.26	801 802
803	300	7 8 1	65	3 2 1	.18	.23	.36	803
804	16	31	737	3 2	7.22	.33	.44	804
805	5 6	$1\frac{1}{16}$	81	-> 30 g		.42	.56	805
806	3 4	114	10	3 5	.36	U361	.72	806
807	7 8	$1\frac{7}{16}$	113	716	.46	.69	.92	807
808	1	1 5 8	$13\frac{1}{4}$	1 2	.60	.90	1.20	808

CHECK NUT WRENCHES



"Thin", Double Head, 15° Angle

	For U.S. Standard	Openings,	Ex- Thickness	PF	RICE EAG	CH	
No.	Nuts; Size Bolts	Milled	Length of Heads	Un- finished	Semi- finished	Finished	No
825	3 & 7 16	11 & 25 16 & 32	67 3 8 37	\$0,25	\$0,38	\$0.50	825
826	3 & 1	11 & 7	10 32	25	1438	.50	826
827	7 & 1	25 & T	DOTTO	. 25_:	.38	.50	827
828		32 & 31 32 & 31 8 & 32	S1 32 & 32	.33	.50	.66	828
829	7 & 9 16 & 9 1 & 9	25 & 31 1 & 31 2 & 31		.33	.50	.66	829
830	1 & 5	8 & 116		.33	.50	.66	830
831	9 & 5 16 & 8	31 & 116	103 3 & 5	.44	, 66	.88	83
832	9 & 3 16 & 4	31 & 11		.44	.66	.88	83
833	5 & 3 8 & 4	$1\frac{1}{16} & 1\frac{1}{4}$.44	.66	.88	83
334	5 & 8	$1\frac{1}{16} & 1\frac{7}{16}$	$12\frac{5}{8}$ $\frac{5}{16}$ & $\frac{7}{16}$.60	.90	1.20	834
335	3 & 7	14 & 17		.60	.90	1.20	83
336	3 & 1	14 & 15		.60	.90	1.20	83









GENERAL PURPOSE WRENCHES



22½° Angle

For Carriage and Automobile Builders and for General Service in which a long, hight wrench is required.

Milled regularly to dimensions shown below.

Can be milled to special combinations when required.

		_		PI	RICE EAG	CH	
No.	Openings Finished Inches	Extreme Length Inches	Thickness of Heads, Inches	Un- finished	Semi- finished	Finished	No.
500	3 & 1 8 & 2	61	7.9	\$0.13	\$0.20	\$0,26	500
500A	3 & 7 16	$6\frac{i}{4}$	7 3 2	.13	. 20	.26	500
500B	13 & 1 32 & 1	$6\frac{1}{4}$	7 3 2	.13	.20	,26	500I
500C	3 & 1 3 & 7 16 13 & 1 3 & 1 4 & 5 1 & 9 1 & 9 1 & 1 2 & 1 4 & 1 5 & 1 6 & 1 1 &	$6^{\frac{1}{4}}$	$ \begin{array}{r} \frac{7}{32} \\ \frac{7}{32} \\ \frac{7}{32} \\ \frac{7}{32} \\ \frac{7}{32} \\ \frac{7}{31} \\ \frac{7}{31} \\ \frac{7}{32} \\ \frac{7}{32$. 13	.20	.26	5000
501	1 & 5 2 & 8	71	14	.17	.25	.34	501
501A	1 & 9 16	71	1/4	.17	.25	.34	501
501B	19 & 11 32 & 16	7 1/8	1/4	.17	.25	.34	501
501C	12.76	7 1 8	4_	. 17	. 25	.34	5010
502	8 & 3	$8\frac{1}{4}$	5 16 5 16 5 16 5	.22	. 33	.44	502
502A	9 & 11 16 & 16	$S_{\frac{1}{4}}$	16	.22	.33	.44	502.
502B	5 & 11 9 . 19	81	16	. 22	.33	,44	502
502C	16 & 19 16 & 32		11/16-	.22	,33	.44	502
503	4 & 8	- 40	D (8)	28	.42	. 56	503
503A	10	91		.28 28	.42	.56	503
503B	32		8	128	.42	.56	503
503C	11 A 3	-	- 17:	28	.42	.56	503
504	7 & 1 15 & 1	103	16	.34	.51	, 68	504
504A 504B		$\frac{10\frac{3}{8}}{10\frac{3}{8}}$	16	.34	:51	.68	504
505	$\frac{7}{8}$ & $1\frac{1}{16}$ 1 & $1\frac{1}{8}$	108	16	.34	.51	.68	504 505
505A	1 & 1½ 1 & 1½	12	7	.44	.66	.88 .88	505
505B	1 2 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	12	2 1 2 1 2 1 2	.44	.66	.88	505
505C	1 6 & 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	12	2	.44	.66	,88	505







GENERAL PURPOSE WRENCHES

In Sets





SET A

Contains 5 Wrenches, one each of the following:

	Manufac- turers' Stan-	Openings	Extreme	Thick- ness of	PI	RICE EAG	CH.	
No.	dard Nuts, Size Bolts, Inches	Finished, Inches	Length, Inches	Heads, Inches	Un- finished	Semi- finished	Finished	No.
500	3 & 1	3 & 1	61	37	\$0.13	\$0.20	80.26	500
501	4 & x5	· ·	7 1	1 4	.17	.25	.34	501
502	16 A 3	\$ & 3	81	16	.22	.33	.44	502
503	3 A 76	A I	91	3	.28	.42	.56	503
504	726 de 1	i A h	10%	7,8	.34	.51	.68	504
acked	one set in eard	hoard bo	~		1.14	1.71	2.28	
icked	one set in wood	len box			1.30	1.85	2.45	
acked	une set in rany	as roll	3.6		1.59	2.16	2.73	

SET-B

Contains Weapshas and against the tall a wing

	Manufac- turers' Stan-	Openings	Extreme	Phick-	PI	RICE-EAG	311	
No.	dard Nuts, Size Bolts, Inches	Finished, Inches	Length, Inches	ness of Heads, Inches	The the	Semi- finished	Finished	No.
500 502 504	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 & ½ 5 & 2 7 & 1	61 81 108	12 16 16 16	80.13 .22 .84	*0.20 .33 .31	\$0.26 .44 .68	500 502 504
Paeked	one set in cardl one set in wood one set in cauv	en box			.69 .85 1.14	1.04 1.20 1.49	1.38 1.54 1.83	

SET D

Contains 5 Wrenches, for A. L. A. M. Standard Nuts and Cap Screws, one each of the following:

	For A.L.A.M. Standard Nuts and	Openings	Extreme	Thick- ness of	PI	RICE EAG	сн	
No.	Cap Screws, Size of Holts, or Cap Screws	Finished, Inches	Length, Inches	Heads, Inches	Un- finished	Semi- finished	Finished	No.
500 502A	1 k 18 - 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	61	32	\$0.13	\$0.20 .33	*0.26	500 502A
503 504A	4 76	15 & 1 P	10	176	.28	. 3.51	.56 .68	503 504 A
505C	one set in card	EVI	sea.	التار	1.41	2.12	** .88 2.82	505C
Packed	one set in wood one set in canva	en box			1.57	2.27 2.57	2.99 3.27	



MARK



GENERAL PURPOSE WRENCHES In Sets





SET C
Contains 3 Wreoches, one each of the following:

	U. S. Stao-	Openings	Extreme	Thick-	_ PI	RICE EAG	CH	
No.	dard Nuts. Size Bolts, Inches	Finished, Inches	Length, Inches	ness of Heads, Inches	Un- fioished	Semi- finished	Finished	No.
500B 501B 503B	16 & 4 16 & 8 76 & 8	190 & 1 100 & 16 100 & 16 100 & 16	$\frac{6\frac{1}{4}}{7\frac{1}{8}}$	7 32 1 4	\$0.13 .17 .28	\$0.20 .25 .42	\$0.26 .34 .56	500 H 501 H 503 H
Packed	one set in card one set io wood one set in canv	len box			.58 .74 1.03	.87 1.02 - 1.32	1.16 1.33 1.61	

SET E Contains 6 Wrenches, swelve much used openings, no duplicates, as follows:

	Openings	Extreme	Thickness	PI	RICE EAC	H	
No.	Fioisbed, Inches		of Heads,	nfinished	Semi- finished	Finished	No.
500A 501A 502B 503A 504 505C	2	61 71 81 91 10 12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$0.13 .17 .22 .20 .33 .14	80.20 .25 .33 .42 .51	\$0.26 .34 -44 .56 .68 .88	500 A 501 A 502 B 503 A 504 505 C
Packed one	set in cardboa set in wooden set in caovas	box		1.58 1.74 2.03	2.37 2.52 2.82	3.16 3.33 3.61	

SET F

Contains 6 Wrenches, twelve openings, no duplicates, as follows:

	Openings Extreme Thickness	PRICE	EACH	
No.	Finished, Lengtb, of Heads, Inches Inches Inches	Sen finished finish		No.
500 C 500 A 501 C 502 C 503 C 504 B		.07 .02 .78	20	500 C 500 A 501 C 502 C 503 C 504 B
Packed on	e set io cardboard boxe set io wooden boxe set in canvas roll	1.43 2.	91 2.54 07 2.70 30 2.99	







TEXTILE MACHINE WRENCHES



Double Head, 2210 Angle

For Standard Hexagon or Square Nuts

Num	Length,	Thick-	For Standard	Size of	P	RICE EA	СН	Num-
ber	Inches	ness of Head	Hex. Nuts: Size Bolts	Openings	Unfin- ished	Semi- finished	Finished	ber
550 550A 551 551A 552 552A 553 553A 554A 555A	4 de la dela de	Bis Re	To X de Tien and Tien	TILE	\$0.15 .15 .20 .20 .25 .25 .30 .30 .38 .88 .50	*0.23 .23 .30 .30 .38 .38 .45 .45 .57 .57	*0.30 .30 .40 .40 .50 .50 .60 .60 .76 .76 1.00	550 550A 551 551A 552 552A 553 553A 554 554 555 555A

DOUBLE HEAD "S" WRENCHES



ORSOLE 1224 Angle

G-20	Size of	Phickness	Length	ist.PE	ICE EAC	Н	Num-
	Inches	Inches	Inches	Unfinished	Semi- finished	Finished	ber
220 221 222 223 224 225	3 & 7 8 1 8 1 8 4 8 1 8 1 8 1 8 1 8 1 8 1 8 1	L 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 3 6 7 8 9	\$0.13 .17 .59 .25 .30	\$0.20 .26 .33 .38 .45	80.26 .34 .44 .50 .60	220 221 222 223 224 225





TEXTILE MACHINE WRENCHES





In Sets

SET No. 10

Each set consists of one		PRICES			EXPO	RT PAC	KING
each Textile Wrench. Nos. 550, 551, 552, 553, 554 and 555.	Price per set, Unfin.	Price per set, Semi-fin.	Price, per set, Finished	No. sets to case	Net W'ght lbs.	Gross Wight Ibs.	Measurements each case
Cardboard box	\$1.78 1.93 2.23	82.68 2.83 3.13	\$3.56 3.71 4.01	50 50 50	225 241 225	265 285 265	12 x 14 x 24 x 18 x 24 x 19 x 1

SELECTED SET No. 12

Set of five wrenches containing openings for every size bolt from $\frac{3}{16}$ to $\frac{7}{8}$.

Each set consists of one		PRICES	ار ک	4	EXPO	RT PAC	KING
each Textile Wrench, Nos. 550, 551, 558A, 554 and 555A.	Price per set, Unfin.	Price per set, Semi-fin.	Price per set, Finished	No sets to case	Net W'ght lbs.	Gross W'ght lbs.	Measurements each case
Cardboard box	\$1.58 1.68 1.98	\$2.30 2.45 2.75	\$3.06 3.21 3.51	50 50 50	200 216 200	240 260 240	121 x 141 x 24 131 x 291 x 19 121 x 141 x 24







CONSTRUCTION WRENCHES AND CAR BUILDERS' WRENCHES



15° Angle

Unfinished wrenches have milled openings. Special sizes milled to order.

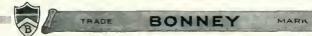
The round tang is for bringing bolt or rivet holes into line, and can be inserted into convenient openings.

No.	For U. S. Standard Nut; Bolt Size	ings	Length	Thick- ness of Head	Un-	Semi- Simished	'H Finished	No.
451 452	3 6	Tella	79.	11 32	\$0.20 \$2	\$0.30	\$0.40 .64	451 452
453	9	$\frac{31}{72}$	122	Vie	C(10)	L 160.1	,80	453
454	5 8	$1\frac{1}{16}$	14	9	.50	.75	1.00	454
455	3	11/4	16	5	.65	.97	1.30	455
456	7 8	$1\frac{7}{16}$	$17\frac{1}{2}$	116	,85	1.28	1.70	456
457	1	1 5	19	3 4	1.10	1.65	2,20	457

STRUCTURAL WRENCHES

Same as above, but with straight opening and off-set heads.

	For U. S. Standard	0.1	Extreme	Thickness	PRICE	EACH	
No.	Nut; Size Bolt	Opening	Length	of Head	Un- finished	Semi- finished	No.
481 482 483 484 485 486 487	38 12 116 116 116 116 116) 115 164 15 15 116 116	$\begin{array}{c} 9 \\ 11\frac{1}{2} \\ 12\frac{7}{4} \\ 14\frac{1}{3} \\ 16 \\ 17\frac{1}{2} \\ 19 \\ \end{array}$	-11 32 16 2 16 2 16 3 11 16 3 3 4	\$0.20 .32 .35 .50 .65 .85	\$0.30 .48 .53 .75 .97 1.28 1.65	481 482 483 484 485 486 487





DOUBLE HEAD CAR WRENCHES



221° Angle, Long Leverage

Unfinished are milled only.

Semi-finished are milled, edges ground and case-hardened all over. Bright heads.

In stock for U.S. Standard nuts.

Finished wrenches can be supplied at double unfinished price.

	For U.S. Standard	Openings	Extreme Length	Thickness Heads	PRICE EACH		
No.	Nuts; Size Bolts				Un- finished	Semi- finished	No.
367	3 & 1	23 & 29 23 & 32	12	7 16 & 2	\$0.50	\$0.75	367
370	\$ & \frac{1}{2} & \frac{5}{8}	15 & 1 h	19	1 & 1	.85	1.28	370
371	1 & 3	15 & 15 16 & 15	19	1 & 1 2 & 2	.85	1.28	371
372	1 & 7	15 & 12	20	2 & 2	.92	1.38	372
373	12 & 78 5 & 4 5 & 4	1 & 1 5 & 1 5	20	1 & 1 2 & 2	.92	1.38	373
374	5 8 7	11 & 4 12	21	2 & 2	1.00	1.50	374
375	15 64	11 & 111	21	1 1 2	1.00	1.50	375
376	3 & 7	1 6 & 11	21 7	1 1 2	1.00	1.50	376
377	SAFEL T	15 & 111	- 55	& 1/2	1.10	1.65	377
378	1 2011	1 1 17	22	2 & 1	1.10	1.65	378
379	7 & 1	The all S	22	1 & 1/2	1.10	1.65	379
380	7 & 1 ¹ / ₈	11 4 18	23	1 1 k 1	1.23	1.85	380
381	7 & 1 ¹ / ₄	$1\frac{1}{2}$ & $2\frac{1}{16}$	23	4443	1.23	1.85	381
382	1 & 18	116 & 17	28	1 & 2	1.23	1.85	382
383	1 & 14	111 & 216	24 ~	1 & 9 16	1.40	2.10	383
385	18 & 14	1 8 & 21	24	1 & 9 16	1.40	2,10	385
387	1 8 & 1 2	1 2 4 2 7	25	5 2 3	1.70	2.55	387
389	14 & 12	216 & 216	25	1 5 k 3	1.70	2.55	389



BONNEY MALLEABLE GENERAL PURPOSE WRENCHES



Double Head 221/2° Angle

These wrenches are made of the highest grade of malleable iron and are particularly designed for household, farm and automobile use. They are so constructed that it is practically impossible to break them with any ordinary use. The price at which a set of five may be sold at retail, namely 50c., except in the far west and Canada, makes this a particularly attractive and rapid selling line.

Packed for domestic trade, twenty-four sets to the case as shown on next page.

No.	Openings Inches	Length, Inches	Price per Doz., Plain Heads	Price per Doz., Polished Heads	No.
A	3 X ½	51/2	\$0.60	\$0 80	A
В	9 X 5	$6\frac{1}{2}$.80	1.00	В
C	11 X 3	7 3	1.00	1.20	C
D	13 X 5	83	1.20	1.40	D
\mathbf{E}	$\frac{15}{16} \times 1\frac{1}{8}$	$9\frac{1}{4}$	1.40	1.60	\mathbf{E}

Packed ½ doz. in cardboard box.

PACKED IN SETS OF FIVE One each of sizes A-E, inclusive

One set packed in cardboard box with Polished Heads\$0.50)
One set packed in eardboard box with Plain Heads	2
Weight each set 21 lbs.	

EXPORT PACKING OF MALLEABLE GENERAL PURPOSE WRENCHES

No. sets to case	Net Weight	Gross Weight	Measurements
100	209 lbs.	245 lbs.	$36 \times 13\frac{1}{2} \times 17$

BONNEY MALLEABLE GENERAL PURPOSE WRENCHES



These Wrenches are made of the highest grade malleable iron, which gives plenty of strength for any ordinary purpose, and are carefully finished with polished heads. Each set consists of five wrenches, ten openings, packed in a strong individual carton, and there are Two Dozen Sets to the Case.

With each case is enclosed, FREE OF CHARGE, a SHOP CAP and a Sample "BONNEY BOX TOOL" which is strong enough to open the heaviest case, but so small that it can be conveniently carried in the pocket.

These Wrenches should be sold over the counter at not less than Fifty Cents a set. In Canada and the Far West the retail price is Seventy-five Cents per set.

Price per case, \$12.00. Weight per ease, 60 lbs.

BONNEY MALLEABLE MACHINERY WRENCHES



These Wrenches are made of the same strong material as our Malleable General Purpose Wrenches; namely, of the highest grade of malleable iron carefully east so that they are strong, tough and practically unbreakable. The heads are polished.

Each set consists of six wrenehes, twelve openings, ranging from $\frac{3}{8}$ " to $\frac{11}{4}$ " by sixteenths; packed one set to a carton, Twenty-four Sets to a Case.

Included with each case of twenty-four sets, FREE OF CHARGE, is a SHOP CAP and a sample BONNEY "JACK RABBIT" WRENCH, a very handy tool, light yet serviceable, containing openings for eight different sizes of nuts.

These sets should be sold over the counter at not less than 50 cents a set, 75 cents a set in the Far West and Canada.

Price per ease, \$12.00. Weight per ease, 55 lbs.







BONNEY MALLEABLE MACHINERY WRENCHES



Double Head 15°

Bonney Malleable Machinery Wrenches are made of the same high grade material as Bonney Malleable General Purpose Wrenches. They are designed for use of such customers as prefer a 15° angle wrench to a 22½° angle wrench. They are slightly shorter than the wrenches for the same size openings in the General Purpose Series but are equally as strong and as well made. These should be sold at 50c. per set of six, at retail, except in the far west and Canada. Packed for domestic trade, twenty-four sets to the case, as shown on preceding page.

No.	Openings Inches	Length Inches	Price per Doz. Plain Heads	Price per Doz. Polished Heads	No.
F G H I J K	3 X 76 12 X 16 5 X 16 6 X 16 3 X 16 4 X 16 18 X 14 18 X 14	$egin{array}{c} 3rac{3}{8} & & & & & \\ 4rac{1}{8} & & & & & \\ 5rac{1}{6} & & & & & \\ 6rac{1}{8} & & & & & \\ 7rac{1}{8} & & & & & \\ 8rac{1}{8} & & & & & \\ \end{array}$	\$0.55 .65 .80 .90 1.00	\$0.65 .80 .95 1.10 1.20 1.30	F G H I J K

Packed one-half dozen in cardboard box.

PACKED IN SETS OF SIX One Each Size F-K Inclusive

One set packed in cardboard box with polished heads	0
One set packed in cardboard box with Plain Heads 0.4	2

Weight each sct, 2 lbs.

EXPORT PACKING OF MALLEABLE MACHINERY WRENCHES

No. sets to ease	Net Weight	Gross Weight	Measurements
100	200 lbs.	235 lbs.	$26\frac{1}{4} \times 15 \times 9\frac{1}{4}$





BONNEY "CROCODILE" WRENCHES



No. 0, 1 and 21 Crocodile Wrenches are stamped from high grade sheet steel. The teeth are milled and the jaws are earefully hardened.

No. 0 and No. 1 have black satin finish and polished jaws.

No. 21 is the same as No. 1 but is polished, case hardened, mottled and lacquered.

No. 1 M is malleable iron, nickel plated.

No.	Length	Holds pipe	Holds round iron	Price per doz.	Wt. per doz.
0 1 21 1 M	4" 53" 53" 53" 53"	1" to 1" 1" " 3" 1" " 3" 1" " 3" 1" " 3"	1// to 16/ 1// 4 3// 1// 4 3// 1// 4 3// 1// 4 3// 1// 4 3//	\$3.00 4.00 8.00 10.00 per gross	1¼ lbs. 3½ " 3½ " 2½ "

Packed 1 doz. in a box.



Nos. $1\frac{1}{2}$ and $1\frac{3}{4}$ are drop-forged, teeth milled diagonally and jaws hardened and polished. The steel used in the manufacture of all drop-forged "Crocodile" Wrenches is high in earbon and of special analysis.

No.	Length	Holds pipe	Holds round iron	Price per doz.	Wt. per doz.
$\frac{1\frac{1}{2}}{1\frac{3}{4}}$	54" 7"	$\frac{1}{8}''$ to $\frac{3}{8}''$	$\frac{1}{4}''$ to $\frac{3}{4}''$ $\frac{3}{8}''$ " $\frac{1}{1}\frac{1}{8}''$	\$4.50 8.00	4 lbs. 8½ "

Packed ½ doz. in a box.







BONNEY "CROCODILE" WRENCHES



Drop-Forged

No.		Holds pipe, inches	Holds round iron, inches	Price, per doz.	Weight per doz.
			$\frac{1}{2}$ to $1 \dots \frac{5}{8}$ to $1\frac{1}{4} \dots \dots$		13 lbs.
3	15	$\frac{1}{2}$ to $1\frac{1}{4}$		24.00	$18\frac{1}{3}$ " 36 " 78 "
$4\frac{1}{2}$	24	$1\frac{1}{2}$ to $2\frac{1}{2}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	50.00	114 " 147 "

All of the above sizes packed bulk, except No. 2, which is packed \(\frac{1}{2} \) dozen to a box.



TWIN "CROCODILE" Drop-Forged, teeth milled diagonally, and jaws hardened and polished. The steel used is high in carbon and of a special analysis.

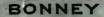
No.	Length inches	Holds pipe, inches	Holds round iron inches	Price, per doz.	Weight, per doz.
10	10	1/8 to 3/4	$\frac{1}{4}$ to 1	\$18.00	14 lbs.

Packed bulk.

EXPORT PACKING OF "CROCODILE" WRENCHES

	N	et Weight G	ross Weight	Measurements,
Size	No. to ease	lbs.	lbs.	inches
0	144 doz	180	209	32 x $11\frac{1}{2}$ x 9
1	36 "			22 x 12 x 8
21		126	$156.\ldots$	22 x 12 x 8
1M	36 "	90	120	22 x 12 x 8
$1\frac{1}{2}$	50 "	212	256	32 x 18 x 12
$1\frac{3}{4}$	30 "		291	$31\frac{1}{8} \times 12\frac{1}{2} \times 12$
2	25 "	325	364	$32 \times 17 \times 15\frac{3}{4}$
2^1_2		368	$405.\ldots$	$32 \times 12\frac{1}{2} \times 14\frac{1}{2}$
3	10 "		398	$24\frac{1}{2} \times 14\frac{3}{8} \times 17$
4	3 "	234	262	23 x $14\frac{1}{2}$ x 10
$4\frac{1}{2}$		114	150	$26 \times 9 \times 6\frac{1}{4}$
5	1 "	147	179	$29 \times 10 \times 8_4^3$
10 (Twin)	20 ''	280	320	$26\frac{3}{4} \times 12 \times 12$









THE "VIXEN" WRENCH



The "Vixen" Wrench is designed as a handy pocket tool for use around the farm or automobile. The two ends are milled with teeth of capacity to turn pipe from $\frac{1}{4}$ " to $1\frac{1}{4}$ ". The tapped holes in the center are made to restore or clean threads on bolts that have become bruised or battered. The openings are not intended to be used for cutting new threads. Vixen Wrenches are made in three finishes—Blue, White Nickel and Full Nickel. All finishes are drop-forged, ground, polished and hardened. Furnished in U. S. Standard or Whitworth Threads. Length over all, $7\frac{3}{4}$ ".

U. S. STANDARD THREADS $\frac{5}{16}$ -18, $\frac{1}{2}$ -13, $\frac{3}{8}$ -16 WHITWORTH THREADS $\frac{5}{16}$ -18, $\frac{1}{2}$ -12, $\frac{3}{8}$ -16

Finish	Weight per doz.	Price
Blue	11 lbs.	\$5.00 per doz.
White Nickel	11 "	\$5.00 per doz.
Full Nickel	11 "	9.00 "

Packed ½ doz. in cardboard box.

EXPORT PACKING OF "VIXEN" WRENCHES (All Finishes)

No. to case	Net Weight, lbs.	Gross Weight. lbs.	Measurements
20 doz.	220	261	$24_4^1 \times 15_4^3 \times 15_4^3$







THE "BABY VIXEN" WRENCH



The "Baby Vixen" Wrenches are similar to "Vixen" wrenches, but smaller in size. The teeth will turn pipe from $\frac{1}{4}$ " to $\frac{3}{4}$ ". The tapped holes are furnished either U. S. Standard or Whitworth Threads as ordered, in sizes $\frac{5}{16}$, $\frac{1}{4}$ and $\frac{3}{8}$. Made in three finishes. Length, $5\frac{1}{2}$ ".

Finish	Weight per doz.	Price
Blue	6 lbs.	\$4.50 per doz.
Mottled	6 "	\$4.50 per doz. 6.00 "
Full Nickel	6 "	7.50 "

Packed $\frac{1}{2}$ doz. in cardboard box.

EXPORT PACKING OF "BABY VIXEN" WRENCHES

No. to case	Net Weight	Gross Weight	Measurements
12 doz.	72 lbs.	87 lbs.	22 x 12 x 8







ALWAYS READY WRENCHES



Nickel Plated

These wrenches are drop-forged from special wrench steel, are carefully ground and polished and are hardened to withstand the severest strain. They have a large range of openings and for their compactness are very handy pocket tools.

The nickel plating is absolutely the best and is guaranteed not to

chip or pecl.

No.	Length	Holds Pipe	Wt. per doz.	Price per doz.
1	$5\frac{1}{2}$ in.	1 to 3	6 lbs.	\$ 5.00
2	7 "	$\frac{1}{4}$ " $1\frac{1}{4}$	11 "	6.75
21	91 "	$\frac{1}{2}$ " $1\frac{3}{4}$	25 "	10.50
3	11 "	3 " 1 ³ ₄	37 "	16.00

Packed 1 doz. in cardboard box.



The Black Always Ready Wrenches are the same in weight, length and capacity as the nickel plated, but are made with polished jaws which appear in relief.

No.	Length	Holds Pipe	Wt. per doz.	Price per doz.
1	$5^{\frac{1}{2}}_{2}$ in.	1 to 3	6 lbs.	\$ 4.50
2	4	i " 1i	11 "	6.25
$2\frac{1}{2}$	$9\frac{1}{4}$ "	$\frac{1}{2}$ " $1\frac{3}{4}$	25 "	10.00
3	11 "	3 " 13 T	37 "	15.25

Packed ½ doz. in cardboard box.

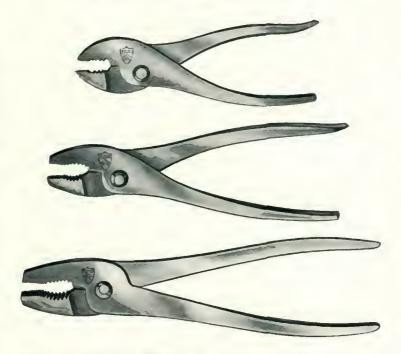
EXPORT PACKING OF ALWAYS READY WRENCHES—SAME PACKING FOR BOTH FINISHES

Size	No. to ease	Net Wt. Lbs.	Gross Wt. lbs.	Measurements
1	12 doz.	72	87	22 x 12 x 8
2	15 "	167	190	$22\frac{1}{4} \times 15\frac{3}{4} \times 9\frac{3}{4}$
$\frac{2^{\frac{1}{2}}}{3}$	15 "	375	415	$24\frac{1}{2} \times 16 \times 16$
3	6 "	222	257	$21\frac{1}{2} \times 14\frac{3}{4} \times 13$





BONNEY COMBINATION PLIERS



Bonney Combination Pliers are drop-forged from high earbon steel, are carefully machined, hardened and polished. They are made in two finishes; Polished and Nickel Plated, and Blued. Each Plier combines a regular plier, wire cutter and serew driver.

The opening of the jaw can be enlarged to a very wide eapacity by turning the handle slightly and by sliding the rivet from one hole to

the other.

These pliers are used generally by mechanics of all kinds. They have become absolutely indispensable about an Automobile or Motorcycle.

They are packed in individual cardboard cartons.

		PRICE LIST		
Size	Capacity		Polished and Nickel Plated	
6" 8" 10"	14" pipe	PACKED FOR EXPO	18.00 21.00	\$13.50 16.00 18.00
Size	No. to case		Gross Wt., lbs.	Measurements
6" 8"	24 doz.	160		30 x 17 x 9 ¹ / ₄
8''	24 "	198	240	$30 \times 10^{\frac{1}{4}} \times 19$
10"	12 "	156	190	$24 \times 12\frac{1}{2} \times 17$







CHAMPION VISES IN SETS



Set No. C1 and No. C2

This stand is designed for use in stores where complete stock of all sizes of CHAMPION VISES are earried. As there is only one of each size and pattern of vise, the assortment is suitable for display only.

No. C 1 set includes one each of every size of Champion Vise with clamp base. No. C 2 set includes No. C 1 set and one each of every size of swivel base Champion Vise.

PRICE LIST

Set No. C1.	Sample stand and 12 vises, price per set \$20.75
Set No. C2.	Sample stand and 18 Vises, price per set

EXPORT PACKING OF No. C1 AND No. C2 SETS

	No. sets to case	Net wt. per case	Gross wt. per case	Measurements
Set No. C 1	. 1	56 lbs.	78 lbs.	25 x 14 x 7
Set No. C 2	1	86 "	115 "	$25 \times 14 \times 10^{\frac{1}{2}}$





CHAMPION VISES, IN SETS



Set No. 5

Set No. 5 contains twelve Champion Viscs. All except one arc

of the elamp base pattern. They are all warranted.

This is an excellent assortment for a small store which has a trade almost exclusively for high grade tools.

Each set packed in a strong ease ready for reshipment.

LIST PRICE, SET No. 5

Quantity	No.	Description	Size	of jaw	Weig	ht each	Price
3	112	Steel front jaw	1½ in	ches	11/4	lbs.	\$1.15
2	113	Steel front jaw	13	"	13	64	1.08
1	114	Steel front jaw	2	"	21	66	.75
1	115	Steel front jaw	21	"	23	61	1.00
1	116	Steel jaws	2	**	23 21 21	66	1.25
1	117	Steel jaws and swivel					
		jaw	2	**	23	6.6	1.75
1	118	Steel front jaw	21	"	$3\frac{3}{4}$	46	1.50
1	121	Steel front jaw	ร์	44	$6\frac{3}{4}$	46	2.00
1	127	Steel jaws and swivel					
		base	$2\frac{1}{2}$	"	41	**	2.00
Sampl	le stand						1.04
Sampl	e stand and 19	2 Vises, priee per set					\$13.50

EXPORT PACKING OF No. 5 SET

No. sets to case	Net Wt. per case	Gross Wt. per case	Measurements
1	34 lbs.	50 lbs.	$30\frac{1}{4} \times 13 \times 6\frac{1}{2}$







BONNEY CHAMPION VISES



Champion Vises are made especially for the most particular tool users and are warranted against defects and breakage.

They are manufactured in sizes from $1\frac{1}{2}$ to 3-inch jaw with elamp

base and some sizes in both clamp and swivel base designs.

All front jaws are made of high grade semi-steel and the back jaws of best quality gray iron. Some sizes have steel plates inserted in the back jaws. These are particularly desirable for jewelers, die makers and key filers who will use the vise for clamping a great many pieces of the same size.

The serews are turned from bar steel and have lathe cut threads.

All Champion Vises are finished in a bright red baking enamel and the jaws, serews, slides and anvils are highly polished.

Sizes 112 to 120 inclusive are packed two in a cardboard box; all other sizes in individual boxes.

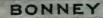
PRICE LIST-Clamp Base

No.		Size of Jaw	Weight, each	Price, per doz.
112	Steel front jaw	$1\frac{1}{2}$ in	1½ lbs	\$ 4.50
113	Steel front jaw	$1\frac{3}{4}$ "	$1^{\frac{3}{4}}$ "	6.50
114	Steel front jaw	2 "	$2\frac{1}{2}$ "	9.00
115	Steel front jaw	21 "	$2\frac{3}{4}$ "	12.00
116	Steel jaws	2 "	21 "	15.00
117	Steel and swivel jaw	2 "	23 "	21.00
118	Steel front jaw	$2\frac{1}{2}$ "	$3\frac{3}{4}$ "	18.00
119	Steel jaws	2^{1}_{2} "	34 "	24.00
120	Steel jaws and swivel jaw	$2\frac{1}{2}$ "	4 "	30.00
121	Steel front jaw	3 "	$6\frac{3}{4}$	24.00
122	Steel jaws	3 "	$6\frac{3}{4}$ " ,	30.00
123	Steel jaws and swivel jaw.	3 "	7 "	36.00

Swivel Base

No.		Size of Jaw	Weight, each	Price, per doz.
125	Steel jaws	2 in	3 lbs	\$15.00
126		2 "	3 "	21.00
127		21 "	41 4	24.00
128		21 "	41 "	30.00
	Steel jaws	3 "		36.00
	Steel jaws and swivel jaw.	3 "	81 "	42.00
	*		-	









BONNEY VISES



Bonney Vises are made for general household and amatcur uses. They are lower priced than the Champion Vises, but are made with the same care and attention to fit and finish as our more expensive lines.

The jaws are made of best grade gray iron and the main and thumb screws are east semi-steel with threads that are all cut, not cast.

The head and collar is of a single piece with the main screw and will not wear out or pull off.

Bonney Vises are finished in black baking enamel with polished serews, jaws and anvils.

All sizes are packed two in a eardboard box.

PRICE LIST

No.		Size of	IJ	av	V	Weig	ht,	each	Price per doz.
1	Iron jaws	$1\frac{1}{2}$	in	١		 11	lb	s	\$3.75
11	Iron jaws	13/4					66		5.00
2	Iron jaws		6 6			 	. "		6.50
$2\frac{1}{2}$	Steel jaws	2	66			 0.1	66		9.75
3	Steel jaws with swivel jaw	21	6 6			 0.3	66		12.00
$3\frac{1}{2}$	Iron jaws	21	66			 0.2			8.50
4	Iron jaws	23	66			 4.1	66		16.50
5	Iron jaws with swivel attachment		66			 41	6.6		19.50
6	Steel jaws		6.6			 			19.50
7	Steel jaws with swivel attachment		66			 4 1	6.6		22.50
8	Steel jaws and swivel base		66			 41	6 6		19.50
9	Steel jaws with swivel jaw attachment			·		- 2			1.
	and swivel base		6.6			 43	6.6		22.50

These vises are packed in sets when so desired, both in various sizes and patterns of this line and also combined with Champion Vises.





BONNEY VISES, IN SETS



Set No. B-1

This set is intended for display only. It should be used only in stores where complete stocks of all sizes of Bonney Viscs are carried. Contains one each of every size of Bonney Visc from No. 1 to No. 9, inclusive. Each set is packed in a strong case ready for reshipment.

LIST PRICE, SET No. B-1

Quantity	No.	Description	Sizo	of ja	W	Wt.	each	Price
1	1	Iron jaws	11 i	nches.		11/4	lbs.	\$ 0.31
1	$1\frac{1}{2}$	Iron jaws	1 3	66			44	.49
1	2	Iron jaws		66		$\frac{1\frac{1}{2}}{1\frac{3}{4}}$	66	. 54
1	$2\frac{1}{2},\ldots$	Steel jaws	2	66		21	6.6	.81
1	3	Steel jaws and swivel	-			2		
		jaw	21	44		23	4.6	1.00
1	$3\frac{1}{2}$	Iron jaws	21	6.6		23	6.6	.71
1	4	Iron jaws	23	64		41	6.6	1.37
1	5	Iron jaws and swivel	-4			- 2		
		jaw	23	44		41	6.6	1.68
1	6	Steel jaws	23	66		41	44	1.63
1	7	Steel jaws and swivel			•	- 2		
• • • • • • • • • •		jaw	23	6.6		13	**	1.87
1	8	Steel jaws and swivel	-4			- 2		
	0 1,11111	base	23	64		43	6.6	1.63
1	9	Steel jaws, swivel jaw				- 2		
	0 1111111	and swivel base	23	44		43	44	1.87
Samp	le stand, lengtl	h, 28 inches				- 4		1.21
- Control	ic season, ronge	.,						
Samp	le stand and 1	2 Vises, price per set						\$15.00

EXPORT PACKING OF No. B-1 SET

No. sets to case	Net Wt. per case	Gross Wt. per case	Measurements
			500
1	45 lbs.	60 lbs.	$30\frac{1}{4} \times 13 \times 6\frac{1}{2}$







BONNEY VISES, IN SETS



Set No. B-2

This set is for use in small stores where a small stock of only a few sizes is earried. It is a particularly desirable assortment for wholesalers as it is packed ready for reshipment in a strong case, thus simplifying storage and reducing shipping expenses.

For replenishing the retail merchant's stock it is necessary for the wholesaler to have on hand a supply of only five sizes of Vises.

LIST PRICE, SET No. B-2

Quantity	No.	Description	Size	of jav	v T	Wt. each	Price
3 each	1	Iron jaws	11 in	nches.		1½ lbs.	\$ 0.94
	2 3	Iron jaws Steel jaws and swivel	2			13 "	2.16
•		jaw	21 23	"		23 " 41 "	$\frac{2.00}{2.74}$
1 "	4 7	Steel jaws and swivel		"		_	1.87
Sam	ole stand						1.29
Sami	ole stand and 1	2 Vises, price per set					\$11,00

EXPORT PACKING OF No. B-2 SET

No. sets to case	Net Wt. per ease	Gross Wt. per case	Measurements
1	38 lbs.	60 lbs.	$21\frac{1}{2} \times 15\frac{3}{4} \times 6\frac{1}{2}$







BONNEY AND CHAMPION VISES, IN SETS



Combination Set No. 3

Combination Sets No. 3 and No. 4 are designed for retail stores having a demand for tools of various grades. These sets contain both Bonney and Champion Vises. The Bonney Vise very low in price and unwarranted, and the Champion Vise slightly higher in price and thoroughly warranted.

LIST PRICE, SET No. 3

Quantity	No.	Description	Size	of J	aw	Wt.	each	Price
6	1	Iron jaws (Bonney)	11 in	ache	s	11	lbs.	\$ 1.88
3	$1\frac{1}{2}$	Iron jaws	1 3	66		11	4.6	1.23
3	2	Iron jaws	2	66		13	66	1.63
2	$2\frac{1}{2}$	Steel jaws	2	4.4		21	4.6	1.63
2	$3\frac{1}{2}$	Iron jaws	21	6.6		23	66	1.49
2	4	Iron jaws	23	66		41	44	2.7
1	5	Iron jaws with swivel jaw	23	66		41	66	1.63
1	6	Steel jaws	23	66		41	66	1.6
3	112	Steel front jaw (Champion).	$\tilde{1}\frac{1}{2}$	66		11	66	1.13
2	113	Steel front jaw	13	4.6		13	6.6	1.08
2	114	Steel front jaw	2	66	• •	01	66	1.50
	115	Steel front jaw	$\frac{2}{2\frac{1}{4}}$	44	• •	a 3	66	1.00
1		Steel front jaw	$\frac{2}{4}$	+6		23	66	
1	117	Steel front jaw and swivel jaw		66	• •	21	66	1.7
1	118	Steel front jaw	$2\frac{1}{2}$	66	• •	37	66	1.50
1	119	Steel jaws	$2\frac{1}{2}$	44	• •	34	66	2.00
1	121	Steel front jaw	3	+6	• •	$6\frac{3}{4}$	66	2.00
1,	122	Steel jaws	3	66		63	66	2.50
1	125	Steel jaws and swivel base	2	66		3	66	1.2
1	129	Steel jaws and swivel base	3	**		8	••	3.00
Sa	mple stand							1.47
Sa	mple stand	and 35 Vises, price per set						\$34.00

EXPORT PACKING OF No. 3 SET

No. sets to case	Net Wt. per ease	Gross Wt. per case	Measurements
1	110 lbs.	138 lbs.	26 x 15 x 11







BONNEY AND CHAMPION VISES, IN SETS



Combination Set No. 4

Set No. 4 is particularly recommended for medium size stores. The stand used in connection with this set takes up counter space of only 18 inches x 11 inches and is very attractive in appearance.

The use of this stand will not only increase vise sales but also add a very ornamental display fixture.

LIST PRICE, SET No. 4

Quantity	No.	Description	Size of Jaw	Wt. each	Price
6	1	Iron jaws (Bonney)	1½ inches	11 lbs.	\$ 1.88
4	$1\frac{1}{2}\dots$	Iron jaws	13 "	11/2 "	1.67
2	2	Iron jaws	2 "	13 "	1.08
2	$3\frac{1}{2}$	Iron jaws	21 "	$1\frac{3}{4}$ " $2\frac{3}{4}$ "	1.42
1	4	Iron jaws	23 "	41 "	1.38
6	112	Steel front jaw (Champion)	$1\frac{1}{2}$ "	11 "	2.25
2	113	Steel front jaw	13 "	13 "	1.08
2	114	Steel front jaw	2 "	21 "	1.50
1	115	Steel front jaw	21 "	23 "	1.00
1	118	Steel front jaw	21 "	33 "	1.50
Sam	ple stand				1.24
	•				
Sam	ple stand a	nd 27 Vises, price per set			\$16.00

EXPORT PACKING OF No. 4 SET

No. sets to case	Net Wt. per case	Gross Wt. per case	Measurements
1	59 lbs.	82 lbs.	$22\frac{1}{2} \times 15\frac{3}{4} \times 6\frac{3}{4}$







BONNEY STANDARD VISES



Set No. 10

Bonney Standard Vises are similar to Bonney Vises illustrated on page 47. There are only four sizes of this pattern. Two of these sizes are not made io Bonney Vises. These are No. 00 and No. 02\frac{3}{2}. The No. 00 has a one-inch jaw and the No. 02\frac{3}{2} a 2\frac{1}{2}-inch jaw. This is an ideal assortment for the small retail store and is particularly attractive for wholesalers.

LIST PRICE SET No. 10

Quantity	No.	Description	Size of Jaw	Weight, each	Price
6	00	Iron jaws	1"	ĭ lb	\$1.63
6	01	Iron jaws	11/2"	$1\frac{1}{2}$ "	1.87
3	02	Iron jaws	v"	21 "	1,63
2	$02\frac{1}{2}$	Iron jaws	21"	4	2.00
	Sample	Stand			1.12

EXPORT PACKING OF No. 10 SETS

Sample Stand and 17 Vises.....

No, sets to case Net Wt. per case Gross Wt. per case Measurements 31_4^3 lbs. 38 lbs. $13_4^3 \times 10 \times 6_2^4$

BONNEY STANDARD VISES



Bonoey Standard Vises are packed two in cardboard box. They are finished to black baking enamel with polished screws, jaws and anvils.

LIST PRICE

		LIDI I RICL		
No.	Description	Size of Jaw	Weight, each	Price, per doz.
00	Iron jawsIron jaws	$1''$ $1\frac{1}{2}''$	1 lb	\$ 3.25
02	lron jaws	2"	21 "	6.50
$02\frac{1}{2}$	Iron jaws	$2_2^{\prime\prime}$	4 "	12.00





BONNEY HERCULES JEWELERS VISES



Hercules Vises are made throughout of scmi-steel castings and will with ordinary usage last a life-time. The main screws are turned from bar steel and securely fastened so that they cannot wear or pull out. All Hercules Vises are made so accurately that they comply with every need of Jewelers, both in delicacy of adjustment and perfection of jaw alignment. They are warranted against breakage of any kind.

No.	Length of Jaw	Opens	Weight	Finish	Price each
100	2"	2"	2 lbs. 2 ozs.	Red Enamel	\$3.00
101	2"	2"	2 " 2 "	Nickel Plated	4.50

BONNEY HERCULES JEWELERS VISES



No.	Length of Jaw	Opens	Weight	Finish	Price, each
200	2"	2"	2 lbs. 3 oz.	Red Enamel	\$3.50
201	2"	2"	2 " 3 "	Nickel Plated	5.00



BONNEY IMPROVED FARMERS' VISES



Straight Jaws

These Vises have hardened tool steel jaws and swivel bases. The jaws have a particularly large range of openings. They are all machined accurately to a close fit and have steel lathe cut serews. The swivels are operated by a malleable iron handle which works on a nut. The adjustment of the swivel base can be made in any position and is accurate and positive.

The vises are finished in a bright maroon enamel and the jaws and anvils are highly polished.

No.	Length of Jaw	Opens, inches	Weight	Price, each
250A	$2\frac{1}{2}$	31	10 lbs.	\$2.25
300	3 "	4	16 "	3.50
350	31/2	$4\frac{1}{2}$	21 "	4.75
400	4	5	261 "	6.00

When desired, these vises are packed one in a wooden box, ready for reshipment.







BONNEY IMPROVED FARMERS' VISES



Swivel Jaws

These Vises are the same in every respect as the vises listed on opposite page with the exception that the jaws have attached swivels.

No.	Length of Jaw	Opens, inches	Weight	Price, each
450	21	3	$10\frac{1}{2} \text{ lbs.}$	\$3.25
500	3	$3\frac{1}{2}$	17 "	5.00
550	31/2	4	221 "	6.25
600	4	41/2	28 "	7,50

When desired, these vises are packed one in a wooden box, ready for reshipment.







BONNEY AJAX MACHINISTS VISES

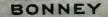


BOX SLIDE STATIONARY BASE

Ajax Machinist Vises are made of special analysis iron. The screw is made of special threading steel. Jaws crucible tool steel, hardened and the nut mallcable iron. All edges, corners and angles are rounded so as to reinforce points that would otherwise be weak.

No. W	idth of Jaw	Opens	Weight	Price, Each
30	2"	. 2"	8 lbs	\$ 4.00
31	$2\frac{1}{2}^{\prime\prime}\dots\dots$. 23"	15 "	5.00
32	$3^{\tilde{\prime}\prime}$. 4"	22 "	
33	$3\frac{1}{2}''$	$5\frac{1}{2}$,	28 "	
34	4"	$5\frac{1}{2}$	42 "	
35	41/1	7"	59 "	10.00
36	$\frac{4\frac{1}{2}''}{5''}\dots\dots\dots\dots$. 8"	77 ''	
37	$5\frac{1}{2}''$		106 "	
38	6"	. 10''	145 "	
39	7''	12"	210 "	









BONNEY AJAX MACHINISTS VISES



BOX SLIDE SWIVEL BASE

Ajax Machinists Swivel Base Vises are of the same general design as the stationary Machinists Vises, but have a large strong swivel base which is adjusted by a hand nut. This method of adjustment gives no trouble and is very desirable.

No.	Width of Jaw	Opens	Weight	Price, Each
880	2"	2"	12 lbs	\$ 5.00
890	$2\frac{1}{2}''$	$2\frac{3}{4}''$	20 "	6.00
900	3"	4"	28 "	7.50
910	$3\frac{1}{2}^{\prime\prime}\dots\dots$	$5\frac{1}{2}^{\prime\prime}\dots\dots$	38 "	8.75
920	$4^{\prime\prime\prime}$	6",	50 "	10.50
930	41"	7"	68 "	12.50
940	$\frac{4\frac{1}{2}''}{5''}\dots\dots\dots$	8"	85 "	16.00
950	$5\frac{1}{2}''$	9''	115 "	22.00
960	$6^{\prime\prime}$	10"	155 "	
970	7''	12"	235 "	42.50



BONNEY "AJAX" WOODWORKERS' VISE



Ajax Woodworkers' Vises are similar in construction to Ajax Machinists Box Slide Vises. The jaws are very thin and flat. The steels inserted in the jaws are smooth to prevent scarring material held in the Vise.

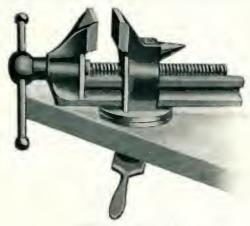
These Vises can be turned in any position on the swivel base parallel with the floor and are locked by a turn of the hand nut. The grip is positive and swivel adjustment cannot slip.

No.	Width of Jaw	Opens	Weight	Price, each
990	$4^{1}_4{}^{\prime\prime}\dots\dots$	9"	50 lbs	\$11.50





BONNEY IMPROVED COACHMAKERS' VISES

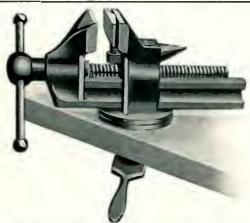


With Straight Jaws

Bonney Coachmakers' Viscs are very similar in pattern to Bonney Improved Farmers' Viscs. The difference exists only in the width of the face of the jaws and in the position of the jaws in relation to the main screw. The jaws of these Coachmakers' Vises are extended over the center of the screw on one side, thus furnishing a strong and secure grip for long pieces which would extend below the surface of the bench.

Main screws are steel with lathe cut threads and swivel adjustment is the same as on Bonney Farmers' Vises.

No.	Length of Jaw	Opens	Weight	Price, cach
650	4"	8"	30 lbs.	\$7.00



With Swivel Jaw For Holding Tapering Pieces

	No. 700	Length of Jaw	Opens 8"	Weight 31 lbs.	Price, eacl \$8.00
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THE GIPSY COMBINATION ANVIL VISE AND DRILLING MACHINE



(Patented)

The Gipsy Vise combines four different tools—Anvil, Straight Jaw Vise, Pipe Vise and Drill Press. It is the handiest tool made, for general repair work on the farm or ranch. Also a very useful tool for general repair work in garages.

The Anvil is 7 inches high, 12 inches long and has 4 inch face. The Vise Jaws are $5\frac{1}{2}$ inches wide and open 8 inches. The Pipe Jaws have a capacity from $\frac{1}{2}$ inch to 2 inch pipe. The Drill Spindle is made for square shank drills and can be removed when not in use.

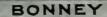
Price Each - - - - - \$10.00

Weight each, 52 lbs. Finished in green enamel.

EXPORT PACKING

No. to Case	Net Weight	Gross Weight	Measurements
2	104 lbs.	125 lbs.	22" x 9½" x 15½"









BONNEY INDISPENSABLE LATHE DOGS



Indispensable Lathe Dogs are made of semi-steel eastings and are earefully assembled to a close and accurate fit. The bosses are sufficiently large to allow retapping should this be necessary. The serews have U. S. Standard threads and dog points. They are carefully hardened to prevent wear.

One of the advantages of Indispensable Lathe Dogs is that a set of three will do all the work of sixteen Heavy Steel Dogs. This means a great saving as the mechanic need not spend his time looking for the proper size for his work.

Another advantage is that Indispensable Lathe Dogs can be attached to the work after it is centered on the lathe. This means a great saving in time on delicate work.

Indispensable Lathe Dogs are warranted against breakage or against defects of material or workmanship.

PRICE LIST

No.	Description	Capacity	Price, each
0	For jewelers and tool makers	1" to 3"	\$1.00
1	For general lathe work	$\frac{1}{4}''$ to $\frac{3}{4}''$	1.50
2	For general lathe work	½" to 21"	2.50
3	For general lathe work	$\tilde{1}''$ to $3\frac{1}{4}''$	3.50

Price per set of three, one each from No. 1 to No. 3, capacity 1" to 31" - \$7.50







HEAVY STEEL LATHE DOGS



Steel screws U.S. Standard, points hardened—made with a heavy boss, which can be re-tapped for larger screw should thread become worn.

No.	Inch	Each		Inch	2300011
1	3	\$0.40	12		\$1.20
2	$\frac{1}{2}$	50	13	21	1.35
3	58	60	14	$2^{\frac{1}{2}}$	1.45
4		60	15		1.60
5	· · · · · · · · · · · · · · · · · · ·	70		$3\frac{1}{2}$	
6		70	17	4	2.10
7	$\dots \dots 1^{\frac{1}{8}}\dots$	80	18	$\dots \dots 4^{1\over 2}\dots\dots$	2.75
8	$1^{\frac{1}{4}}$	80	19		3.25
9	$\dots \dots 1^{\frac{3}{8}}\dots$	95	20	$\dots \dots 5\frac{1}{2}\dots$	4.00
10	$1,\ldots,1^{\frac{1}{2}},\ldots$	95	21	6	5.00
11	$1^{\frac{1}{4}}$	1.10			

STRAIGHT TAIL LATHE DOGS



Similar to Heavy Steel Dog, but with straight tail. Preferred by many machinists because of the direct action on the work.

No.	Inch	Each	No.	Inch	Eac
1	$\frac{3}{4}$	80.60	10	21	\$1.5
	77		11	$2^{\frac{1}{2}}$	1.4
3	1	70	12	3	1.6
4	\dots $1^{\frac{1}{R}}$ \dots	,80	13	$3\frac{1}{2}$	1.8
5	$\dots 1^{\frac{1}{4}}\dots$,80	14	4	2.1
6	\dots $1^{\frac{3}{8}}$ \dots	,95	15	\dots $4\frac{1}{2}$ \dots	2.7
7	$\dots 1^{\frac{1}{2}}\dots$,95	16	5	3.2
8	$\dots 1^{\frac{3}{4}}\dots$	1.10	17	$\dots \dots 5^{1}_{2} \dots \dots$	4.0
9	2	1.20	18	6	5.0







LIGHT STEEL LATHE DOGS



These Dogs are designed for lighter work than Heavy Steel Dogs. They have steel screws U. S. Standard and points are hardened. The boss is sufficiently large to allow retapping.

LIST PRICE

Го.	Inch	Eac
1,,	3	\$0.3
2	$\frac{1}{2}$	
		. 5
4	1	. 6
5	14	.7
6	$1\frac{1}{2}$	8.
7	1^3_4	1.0
8	2	1.1
9	$2\frac{1}{2}$	1.4
0	3	1.8
1	$3_{\frac{1}{2}}^{1}$	1.7
2	4	1.9

AMATEUR'S DOGS



Very similar in construction to Light Steel Dogs. Serews are steel with points hardened.

LIST PRICE

No.		Each
1	3 of an inch bore	\$0.30
2	$\frac{1}{2}$ of an inch bore	.35
3	³ / ₄ of an inch bore	.45
4	I inch bore	.50



MARK



BONNEY

Original Patent Hollow Auger No. 4

BONNEY

Improved Hollow Auger





Cast-iron frame. Adjustable stop. Frame japanned, plate, nickel plated. Price per doz...........\$10.00

Steel frame, extra heavy knife. Improved stop. Frame japanned. Plate, nickel plated.

Price per doz.....\$24.00

Packed & doz. to cardboard box.

BONNEY

Spoke Trimmers No. 2

BONNEY

Spoke Trimmers No. 1



DONAL DO

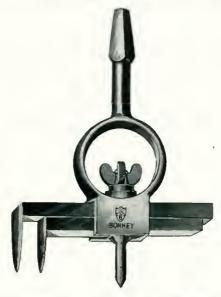
Packed $\frac{1}{2}$ doz. in cardboard box.







COOPER'S PATENT WASHER CUTTER



Packed ½ doz, in cardboard box.

COMMON SENSE BENCH STOP



LIGHTNING BENCH STOP



Grey iron body and Malleable iron plate.

Body japanned and plate polished.

Countersunk in bench. Operated by spring and wing nut.

Grey iron frame and Malleable iron plate, polished. Operated by friction and spring.

Price per doz\$3.50

Packed ½ doz. in eardhoard box.





BONNEY BOX TOOL



Drop-forged from bar steel

Bonney Box Tools are designed for the use of Green Grocers, Produce Men, Fruit Packers and Farmers. They are also found to be very useful in the shipping and packing departments of all business houses. For the reason that they are light, strong and yet not bulky, they are a very handy pocket tool. Finished in dull black with head and blade polished.

PRICE LIST

	Length, inches	Weight per Doz.	Price per Doz.
Bonney Box Tools	81/2	11 lbs.	\$6.00

Packed in individual cartons.

EXPORT PACKING

No. to case	Net Weight	Gross Weight	Measurements	
12 dozen	131 lbs.	158 lbs.	14 x 10½ x 11	

BONNEY TACK CLAW



This is absolutely the strongest tack claw made. It is forged from high grade steel and will last a life-time. Length 7 inches. Weight per doz 3 lbs. 1 oz.

Packed 1 doz. in cardboard box.

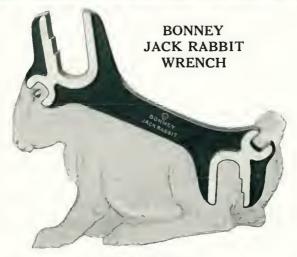
EXPORT PACKING

No. to Case	Net weight	Gross weight	Measurements
50 dozen	154 lbs.	180 lbs.	27x9\frac{1}{2}x10\frac{1}{2}









Malleable Iron

Bonney Jack Rabbit Wrenehes are made of the same tough grade of Malleable Iron as Bonney Malleable General Purpose and Machinery Wrenches. They are made to fit the eight different standard nuts used principally on farm machinery. Very handy to put in the tool box of any farm implement for quiek repair work. Finished in black baking enamel with polished heads. Paeked in individual cartons.

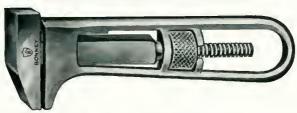
PRICE LIST

Bonney Jack Rabbit Wrenches $8_8^{1/7}$	Weight per doz. Price per doz. $10\frac{1}{2}$ lbs. \$3.00	
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EXPORT PACKING

No. to Case	Net Weight	Gross Weight	Measurements
12 dozen	126 lbs.	157 lbs.	$20\frac{1}{2} \times 20 \times 8\frac{1}{2}$

BONNEY POCKET WRENCH



Made of malleable iron, tinned and suitable for 5 and 10 cent store trade. All threads cut. Brass knurl nut.

PRICE LIST

Bonney Pocket Wrenches	Length $3\frac{3}{4}^{\prime\prime}$	Weight per doz. 2 lbs. $4\frac{1}{2}$ oz.	Price per gross \$10.00

EXPORT PACKING

No to Case	Net Weight	Gross Weight	Measurements 22½ x 16 x 11
100 dozen	230 lbs.	270 lbs.	







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Washer Cutters

